

City of Hamilton

CITY COUNCIL AGENDA

22-012

Wednesday, May 25, 2022, 9:30 A.M.

Due to the COVID-19 and the Closure of City Hall (CC)

All electronic meetings can be viewed at:

City's Website: https://www.hamilton.ca/council-committee/council-committee-meetings/meetingsand-agendas

City's YouTube Channel: https://www.youtube.com/user/InsideCityofHamilton or Cable 14

Call to Order

1. APPROVAL OF AGENDA

(Added Items, if applicable, will be noted with *)

- 2. DECLARATIONS OF INTEREST
- 3. APPROVAL OF MINUTES OF PREVIOUS MEETING
 - 3.1. May 11, 2022
- 4. COMMUNICATIONS
 - 4.1. Correspondence from the Ministry of the Environment, Conservation and Parks respecting Biggars Lane Landfill Expansion Environmental Assessment.

Recommendation: Be received and referred to the General Manager, Planning and Economic Development for appropriate action.

4.2. Correspondence from the Office of the Secretary-General for the Mohawk Nation of Grand River Country respecting the BlueBelt + Grand River, The Haldimand Tract Land Trust Conservancy project.

Recommendation: Be received and referred to the General Manager, Healthy and Safe Communities for appropriate action.

4.3. Correspondence from the Ministry of Northern Development, Mines, Natural Resources and Forestry respecting a Decision Notice - Proposed Regulation Changes under the Aggregate Resources Act.

Recommendation: Be received and referred to the General Manager, Planning and Economic Development for appropriate action.

4.4. Correspondence from the Canadian Wildlife Service - Ontario respecting the Environment and Climate Change Canada Recovery Planning Document on the Species at Risk Public Registry.

Recommendation: Be received and referred to the General Manager, Planning and Economic Development for appropriate action.

4.5. Correspondence from the Town of Rainy River requesting support for their resolution requesting the Connecting Links in small or rural municipalities be returned to the Ministry of Transportation (MTO).

Recommendation: Be received.

- 4.6. Correspondence respecting the Municipal Comprehensive Review / Official Plan Review Phase 1 Amendments to the Urban Hamilton Official Plan and Rural Hamilton Official Plan (PED21067(b)) (City Wide):
 - 4.6.a. Aimee Huffman
 - 4.6.b. Rick and Lynda Johnson
 - 4.6.c. Colin Marshall
 - 4.6.d. Marilyn Marchesseau
 - 4.6.e. Victoria Koch
 - 4.6.f. Colin Chung, Managing Partner, Glen Schnarr & Associates Inc.
 - 4.6.g. Lilly Noble
 - 4.6.h. Juanita Lepage
 - 4.6.i. Ken MacDonald and Barbara Patterson

- 4.6.j. Inger Hinz
- 4.6.k. Mary Stroh and Randy Muirhead
- 4.6.l. Jan Keeton
- 4.6.m. Margie Nash
- 4.6.n. Sarah Laufman
- 4.6.o. Jennifer Waring
- 4.6.p. Paul Lowes, SGL Planning & Design Inc.
- 4.6.q. Heather Zupko
- 4.6.r. Chris & Gene Fitzpatrick
- 4.7. Correspondence from Marijus Gudinskas respecting the decision made on the conversion of Main Street from one-way to two-way.

Recommendation: Be received.

4.8. Correspondence from the City of Cambridge requesting support for their resolution requesting that the Region of Waterloo provide free public transportation on election day for the Municipal and School Board Election, as well as for the Provincial and

Federal Election days.

Recommendation: Be received.

4.9. Correspondence from Martin Zarate in support of amending the by-law to allow drinking in parks.

Recommendation: Be received and referred to the consideration of Item 5 of Public Works Report 22-008

4.10. Correspondence from the City of Brantford requesting support for their resolution requesting the release of all Federal and Provincial Documents Related to the Former Mohawk Institute Residential School.

Recommendation: Be *supported*.

4.11. Correspondence from Louis Frapporti, Partner, Gowling WLG (Canada) LLP respecting Toronto 2015 Pan Am and ParaPan American Games Budget and Funding Structure.

Recommendation: Be received and referred to the consideration of Item 7 of the General Issues Committee Report 22-010.

5. COMMITTEE REPORTS

- 5.1. Public Works Committee Report 22-008 May 16, 2022
- 5.2. Planning Committee Report 22-008 May 17, 2022
- 5.3. General Issues Committee Report 22-010 May 18, 2022
- 5.4. Audit, Finance and Administration Committee Report 22-010 May 19, 2022
- 5.5. Emergency and Community Services Committee Report 22-008 May 19, 2022

6. MOTIONS

- 6.1. Road Reconstruction and Installation of Traffic Calming Measures on Garrow Drive from Garth Street to Cranbrook Drive, Hamilton (Ward 14)
- 6.2. Amendment to the Selection Committee for Agencies, Boards & Committees Terms of Reference
- 6.3. Amendment to the Light Rail Transit Sub-Committee Terms of Reference
- 6.4. Council's Request for the City's Tribunals to Consider Adjusting their Meeting Format
- 7. NOTICES OF MOTIONS
- 8. STATEMENT BY MEMBERS (non-debatable)
- 9. COUNCIL COMMUNICATION UPDATES
 - 9.1. May 6, 2022 to May 19, 2022
- 10. PRIVATE AND CONFIDENTIAL

11. BY-LAWS AND CONFIRMING BY-LAW

11.1. 118

To Amend By-law No. 01-219, a By-law to Manage and Regulate Municipal Parks Ward: City Wide

11.2. 119

To Set Optional Property Classes Within the City of Hamilton for the Year 2022 Ward: City Wide

11.3. 120

To Establish Tax Ratios and Tax Reductions for the Year 2022

Ward: City Wide

11.4. 121

To Set and Levy the Rates of Taxation for the Year 2022

Ward: City Wide

11.5. 122

To Levy a Special Charge Upon the Rateable Property in the Business Improvement Areas for the Year 2022

Ward: City Wide

11.6. 123

To Amend By-law No. 01-218, as amended, Being a By-law To Regulate On-Street Parking

Schedule 6 (Time Limit Parking)

Schedule 8 (No Parking Zones)

Schedule 10 (Alternate Side Parking)

Schedule 12 (Permit Parking Zones)

Schedule 13 (No Stopping Zones)

Schedule 20 (School Bus Loading Zones)

Ward: 2, 3, 4, 5, 8, 10, 11, 15

11.7. 125

To Confirm the Proceedings of City Council

12. ADJOURNMENT



CITY COUNCIL MINUTES 22-011

9:30 a.m.
May 11, 2022
Council Chamber
Hamilton City Hall
71 Main Street West

Present: Mayor F. Eisenberger

Councillors M. Wilson (Deputy Mayor), B. Johnson, N. Nann, B. Clark, M. Pearson, A. VanderBeek, E. Pauls, S. Merulla, L. Ferguson, J.

Partridge, J.P. Danko, T. Jackson and R. Powers.

Absent: Councillor J. Farr – Personal

Councillor T. Whitehead - Personal

Mayor Eisenberger called the meeting to order and recognized that Council is meeting on the traditional territories of the Erie, Neutral, HuronWendat, Haudenosaunee and Mississaugas. This land is covered by the Dish with One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. It was further acknowledged that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation. The City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and it was recognized that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

APPROVAL OF THE AGENDA

The Clerk advised of the following changes to the agenda:

4. **COMMUNICATIONS**

- 4.5 Petition for Draining Works by Road Authority, from Peter Sniuolis respecting Safari Road in the area of 1759 and 1727 is experiencing flooding and water over the road.
 - (a) Background Information respecting the Petition for Draining Works (Item 4.5)

Recommendation: Be received and referred to staff for the preparation of a report to be considered by the Public Works Committee.

- 4.7 Correspondence respecting the Mandatory COVID-19 Vaccination Verification Policy and the cost of terminating employees:
 - (j) Patricia Nicholson
 - (k) Craig Burley
 - (I) Wayne and Bonnie Paterson

Recommendation: Be received.

- 4.11 Correspondence respecting safer streets:
 - (a) Sean and Taryn Theriault
 - (b) Fleur McGeoch
 - (c) Daniel Dunham and Margaret Juraj
 - (d) Mike Lyons
 - (e) Kevin Mutch and Melissa Murray-Mutch
 - (f) Heather Ohrt
 - (g) Ian and Kathleen Fox
 - (h) Jess Atkinson
 - (i) Brie Berry
 - (j) Maureen McKeating
 - (k) Allison Branston
 - (I) Darren Stewart-Jones
 - (m) Marian Toth
 - (n) Brian Suta
 - (o) Amy Norris-Lue
 - (p) Mary Helen Rosenberg
 - (q) Suzanne Levy
 - (r) Beth Hovius
 - (s) Kourtney Michaelis
 - (t) Deborah Tomlinson-Veit
 - (u) Matthew Higginson
 - (v) Sheryl Boblin
 - (w) Ian MacPherson
 - (x) Craig Burley
 - (y) Kathleen Suta
 - (z) Holly McWilliams
 - (aa) Brent van Staalduinen
 - (ab) Allison Barnes
 - (ac) Samantha Sargent
 - (ad) Yvette Cowe
 - (ae) Jeanette Eby
 - (af) Larry Snaidero
 - (ag) Jacob Bohnert
 - (ah) David Broom
 - (ai) Kaitlyn Jardine and Jamie Dugan
 - (aj) Sean Gadoury
 - (ak) Jason Morse
 - (al) Deborah DiLiberto
 - (am) Tasha Findlay-Clairmont

- (an) Zoubin Zarin
- (ao) Barb Williams and Family
- (ap) Melanie Rampen
- (aq) Larissa Ciupka
- (ar) Chris Ritsma
- (as) Stephanie Vegh
- (at) Kristin Campbell
- (au) Marijus Gudinskas
- (av) Ian Turner
- (aw) Matteo Scardellato

Recommendation: Be received and referred to the consideration of Item 7.2 Safety Enhancements to Major Arterial Roads.

4.12 Correspondence from Bob Maton respecting the denial of Application UHOPA-22-004 for an 8 storey condo at 392-412 Wilson Street East in Ancaster.

Recommendation: Be received and referred to the consideration of Item 6 of Planning Committee Report 22-007.

7. NOTICES OF MOTION

- 7.1 Reaffirming Council's Position on the Amendments Required to the *Highway Traffic Act*, to Include Right-of-Way Legislation for Pedestrians
- 7.2 Safety Enhancements to Major Arterial Roads
- 7.3 Banning of Hate Symbols

11. BY-LAWS AND CONFIRMING BY-LAW

To Permanently Close and Sell a Portion of Pinot Crescent, Stoney Creek, namely Part of Pinot Crescent, Plan 62M-1241, City of Hamilton, designated as Parts 1, 2 and 3 on 62R-21878; City of Hamilton

Ward: 10

(Johnson/Pearson)

That the agenda for the May 11, 2022 meeting of Council be approved, as amended.

Result: Motion CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

CEREMONIAL ACTIVITY

Smart Cities Connect - Smart 50 Award to City of Hamilton

This is the 6th Annual Smart 50 Awards Honoring the 50 most transformative smart projects each year. The Smart 50 Awards, in partnership with Smart Cities Connect and Smart Cities Connect Foundation annually, recognize global smart cities projects, honoring the most innovative and influential work.

True Smart Cities at City of Hamilton Using IRIS AI Technologies

Maintenance is critical to the safety and resilience of our infrastructure, yet most technology that gathers asset condition data is expensive or impractical at scale. The award-winning solution enables cities to monitor road and right-of-way infrastructure at a substantially lower cost by using dash cameras with artificial intelligence (AI) to detect road hazards and defects in real time. Additional benefits to the technology includes frequent reporting on industry-standard pavement assessment indexes, right-of-way inventories and assessments and real time mobility data such as vehicle, ped and bike counts, all in one pass. Installed on ubiquitous municipal fleets such as buses and waste collection trucks, IRIS is able to provide frequent, timely and cost-effective pavement and roadway data collection unlike anything offered in the marketplace today. IRIS' technology also reducing significant GHG emissions by replacing dedicated patrols and surveys - while collecting real time data that is applicable and of use to various departments and divisions at the City Of Hamilton. IRIS is also a Hamilton/ Innovation Factory based company and won various local awards including Lions lair 2019. IRIS also works closely with McMaster, Mohawk and other local stakeholders.

DECLARATIONS OF INTEREST

Councillor B. Clark declared a disqualifying interest to Item 4.8 of the Communication Items, respecting the Correspondence respecting the Appeal of Draft Plan of Subdivision Application 25T201806 for Lands Located at 140 Garner Road East, Ancaster (PED22096) (Ward 12), as his son has a retail business interest with the principal of Urban Solutions.

Councillor B. Clark declared a disqualifying interest to Item 4.12 of the Communication Items, respecting the Correspondence from Bob Maton respecting the denial of Application UHOPA-22-004 for an 8 storey condo at 392-412 Wilson Street East in Ancaster, as his son has a retail business interest with the principal of Urban Solutions.

Councillor B. Clark declared a disqualifying interest to Item 5 of Planning Committee Report 22-007, respecting the Appeal of Draft Plan of Subdivision Application 25T-201806 for Lands Located at 140 Garner Road East, Ancaster (PED22096), as his son has a retail business interest with the principal of Urban Solutions.

Councillor B. Clark declared a disqualifying interest to Item 6 of Planning Committee Report 22-007, respecting the Applications for Amendments to the Urban Hamilton Official Plan and Zoning By-law No. 05-200 for Lands Located at 392, 398, 400,402, 406, and 412 Wilson Street East and 15 Lorne Avenue (Ancaster) (PED22070) (Ward 12), as his son has a retail business interest with the principal of Urban Solutions.

Councillor B. Clark declared a disqualifying interest to Item 9 of Planning Committee Report 22-007, respecting Appeal to the Ontario Land Tribunal (OLT) for Refusal of an HCA Permit for Lands Located at 140 Garner Road East (Ancaster) (OLT-21-001567) (LS22020/PED22096(a)) (Ward 12), as his son has a retail business interest with the principal of Urban Solutions.

Councillor E. Pauls declared a non-disqualifying interest to Item 5 of Public Works Report 22-007 respecting the Joint Action by City of Hamilton and Hamilton Police Service to Improve Pedestrian Safety, as her son is employed by the Hamilton Police Service.

Councillor M. Wilson declared a non-disqualifying interest to Item 8 of the General Issues Committee Report 22-009, respecting Facility Naming Sub-Committee Report 22-001, regarding the Renaming of the MacNab Transit Terminal to The Frank A. Cooke Transit Terminal, as the Terminal is being named after her spouse's grandfather.

APPROVAL OF MINUTES OF PREVIOUS MEETING

3.1 April 27, 2022

(Powers/Merulla)

That the Minutes of the April 27, 2022 meeting of Council be approved, as presented.

Result: Motion CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

COMMUNICATIONS

(Wilson/Merulla)

That Council Communications 4.1 to 4.12 be approved, as presented, as follows:

4.1 Correspondence from the Honourable Sylvia Jones, Solicitor General respecting the province's commitment to review and update regulations under the *Provincial Animal Welfare Services Act*, 2019 (PAWS Act) to keep animals safe.

Recommendation: Be received.

4.2 Correspondence from the Town of South Bruce Peninsula requesting support for their resolution requesting that the Government of Canada review its rebate program and consider implementing their rebate program in the same manner as that of Ontario.

Recommendation: Be received.

4.3 Correspondence from the Ministry of the Environment, Conservation and Parks advising that the Ministry is moving forward with Phase 2 regulations to improve the governance, oversight, transparency and accountability of conservation authority (CA) operations.

Recommendation: Be received.

4.4 Correspondence from the Multi-Municipal Wind Turbine Working Group respecting their resolution to address concerns raised related to noise and the public safety of citizens.

Recommendation: Be received and referred to the General Manager of Planning and Economic Development for appropriate action.

- 4.5 Petition for Draining Works by Road Authority, from Peter Sniuolis respecting Safari Road in the area of 1759 and 1727 is experiencing flooding and water over the road.
 - (a) Background Information respecting the Petition for Draining Works (Item 4.5)

Recommendation: Be received and referred to staff for the preparation of a report to be considered by the Public Works Committee.

4.6 Correspondence from Harry Akamphuber respecting File no. ZAC-17-064.

Recommendation: Be received and referred to the General Manager of Planning and Economic Development for appropriate action.

- 4.7 Correspondence respecting the Mandatory COVID-19 Vaccination Verification Policy and the cost of terminating employees:
 - (a) Hayley Vlietstra
 - (b) Betty Vlietstra
 - (c) Bob Maton
 - (d) Eric Vlietstra
 - (e) Fred Vlietstra
 - (f) Rachel Van Dooren
 - (g) Sarah Vlietstra
 - (h) Robert Cooper
 - (i) Harry Droogendyk
 - (j) Patricia Nicholson
 - (k) Craig Burley
 - (I) Wayne and Bonnie Paterson

Recommendation: Be received.

- 4.8 Correspondence respecting the Appeal of Draft Plan of Subdivision Application 25T201806 for Lands Located at 140 Garner Road East, Ancaster (PED22096) (Ward 12):
 - (a) Edin Zeljkovic
 - (b) Kathy Garneau
 - (c) George Counter
 - (d) Shannon French
 - (e) Judy Lanza

Recommendation: Be received and referred to the consideration of Item 5 of Planning Committee Report 22-007.

4.9 Correspondence from the Honourable Peter Bethlenfalvy, Minister of Finance in response to the City's request to establish a Vacant Home Tax for the purposes of improving housing supply and choice in Hamilton.

Recommendation: Be received and referred to the General Issues Committee for further discussion.

4.10 Correspondence from Association of Municipalities Ontario (AMO) respecting Call for Nominations for 2022-2024 AMO Board of Directors.

Recommendation: Be received.

- 4.11 Correspondence respecting safer streets:
 - (a) Sean and Taryn Theriault
 - (b) Fleur McGeoch
 - (c) Daniel Dunham and Margaret Juraj
 - (d) Mike Lyons
 - (e) Kevin Mutch and Melissa Murray-Mutch

- (f) Heather Ohrt
- (g) Ian and Kathleen Fox
- (h) Jess Atkinson
- (i) Brie Berry
- (j) Maureen McKeating
- (k) Allison Branston
- (I) Darren Stewart-Jones
- (m) Marian Toth
- (n) Brian Suta
- (o) Amy Norris-Lue
- (p) Mary Helen Rosenberg
- (q) Suzanne Levy
- (r) Beth Hovius
- (s) Kourtney Michaelis
- (t) Deborah Tomlinson-Veit
- (u) Matthew Higginson
- (v) Sheryl Boblin
- (w) Ian MacPherson
- (x) Craig Burley
- (y) Kathleen Suta
- (z) Holly McWilliams
- (aa) Brent van Staalduinen
- (ab) Allison Barnes
- (ac) Samantha Sargent
- (ad) Yvette Cowe
- (ae) Jeanette Eby
- (af) Larry Snaidero
- (ag) Jacob Bohnert
- (ah) David Broom
- (ai) Kaitlyn Jardine and Jamie Dugan
- (aj) Sean Gadoury
- (ak) Jason Morse
- (al) Deborah DiLiberto
- (am) Tasha Findlay-Clairmont
- (an) Zoubin Zarin
- (ao) Barb Williams and Family
- (ap) Melanie Rampen
- (aq) Larissa Ciupka
- (ar) Chris Ritsma
- (as) Stephanie Vegh
- (at) Kristin Campbell
- (au) Marijus Gudinskas
- (av) Ian Turner
- (aw) Matteo Scardellato

Recommendation: Be received and referred to the consideration of Item 7.2 Safety Enhancements to Major Arterial Roads.

4.12 Correspondence from Bob Maton respecting the denial of Application UHOPA-22-004 for an 8 storey condo at 392-412 Wilson Street East in Ancaster.

Recommendation: Be received and referred to the consideration of Item 6 of Planning Committee Report 22-007.

Due to declared conflicts, Items 4.8 and 4.12, were voted on separately as follows:

- 4.8 Correspondence respecting the Appeal of Draft Plan of Subdivision Application 25T201806 for Lands Located at 140 Garner Road East, Ancaster (PED22096) (Ward 12):
 - (a) Edin Zeljkovic
 - (b) Kathy Garneau
 - (c) George Counter
 - (d) Shannon French
 - (e) Judy Lanza

Recommendation: Be received and referred to the consideration of Item 5 of Planning Committee Report 22-007.

4.12 Correspondence from Bob Maton respecting the denial of Application UHOPA-22-004 for an 8 storey condo at 392-412 Wilson Street East in Ancaster.

Recommendation: Be received and referred to the consideration of Item 6 of Planning Committee Report 22-007.

Result: Motion on Items 4.8 and 4.12 of the Communication Items, CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

CONFLICT - Ward 9 Councillor Brad Clark

Result: Motion on the balance of the Communication Items, CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

(Wilson/Johnson)

That Council move into Committee of the Whole for consideration of the Committee Reports.

Result: Motion CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

BOARD OF HEALTH REPORT 22-005

(Wilson/VanderBeek)

That Board of Health Report 22-005, being the meeting held on Monday, May 2, 2022, be received.

Result: Motion on the Board of Health Report 22-005, CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

PUBLIC WORKS COMMITTEE REPORT 22-007

(Nann/Powers)

That Public Works Committee Report 22-007, being the meeting held on Monday, May 2, 2022, be received and the recommendations contained therein be approved.

Result: Motion on Public Works Committee Report 22-007, CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

PLANNING COMMITTEE REPORT 22-007

(Ferguson/Johnson)

That Planning Committee Report 22-007, being the meeting held on Tuesday, May 3, 2022, be received and the recommendations contained therein be approved.

Due to a declared conflict, Item 5, was voted on separately, as follows:

5. Appeal of Draft Plan of Subdivision Application 25T-201806 for Lands Located at 140 Garner Road East, Ancaster (PED22096) (Ward 12) (Item 10.1)

That Report PED22096 respecting Appeal of Draft Plan of Subdivision Application 25T-201806 for Lands Located at 140 Garner Road East, Ancaster, be received.

Result: Motion on Item 5 of the balance of Planning Committee Report 22-007, CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

CONFLICT - Ward 9 Councillor Brad Clark

Due to a declared conflict, Item 6, was voted on separately as follows:

- 6. Applications for Amendments to the Urban Hamilton Official Plan and Zoning By-law No. 05-200 for Lands Located at 392, 398, 400,402, 406, and 412 Wilson Street East and 15 Lorne Avenue (Ancaster)(PED22070) (Ward 12) (Item 10.2)
 - (a) That Urban Hamilton Official Plan Amendment Application UHOPA-22-004, by Wilson St. Ancaster Inc. (c/o Giovanni Fiscaletti, Applicant / Owner), to amend the Ancaster Wilson Street Secondary Plan to redesignate the lands located at 15 Lorne Avenue from "Low Density Residential 1" designation to "Mixed Use Medium Density" designation with a "Pedestrian Focus"; and, to establish a Site Specific Policy to permit an eight storey mixed use development with a maximum density of 220 units per hectare and provide for the relocation of the existing designated heritage building from 398 Wilson Street East to 15 Lorne

Avenue, on lands located at 392, 398, 400, 402, 406, and 412 Wilson Street East, as shown on Appendix "A" attached to Report PED22070, be DENIED on the following basis:

- (i) That the proposed amendment does not meet the general intent of the Urban Hamilton Official Plan and the Ancaster Wilson Street Secondary Plan with respect to the following matters: right-of-way dedications, building height, residential density, massing, privacy, overlook, setbacks, and compatibility with and enhancement of the character of the existing neighbourhood.
- (ii) The mass, height, and bulk of the proposal is not considered to be good planning and is considered an overdevelopment of the site;
- (b) That Zoning By-law Amendment Application ZAC-22-011, by Wilson St. Ancaster Inc. (c/o Giovanni Fiscaletti, Applicant / Owner), to change the zoning from the Existing Residential "ER" Zone, the Mixed Use Medium Density Pedestrian Focus (C5a, 570) Zone, and the Mixed Use Medium Density Pedestrian Focus (C5a, 570, 651) Zone to a modified Mixed Use Medium Density Pedestrian Focus (C5a) Zone, to permit an eight storey mixed use development with a maximum density of 220 units per hectare, with 1,677 m² of at grade commercial space and 169 dwelling units above with 55 surface parking spaces and 257 underground parking spaces, on lands located at 392, 398, 400, 402, 406, and 412 Wilson Street East and to relocate the existing designated heritage building on the lands located at 398 Wilson Street East to the lands located at 15 Lorne Avenue, as shown on Appendix "A" attached to Report PED22070, be DENIED on the following basis:
 - (i) That the proposed change in zoning does not meet the general intent of the Urban Hamilton Official Plan and the Ancaster Wilson Street Secondary Plan with respect to building height, setbacks, and massing;
 - (ii) That the proposal does not meet the general intent of the Zoning By-law with regards to allowable building height, setbacks, minimum side yard, planting strip;
 - (iii) That the proposal is not considered to be good planning and is considered an overdevelopment of the site.

Result: Motion on Item 6 of the balance of Planning Committee Report 22-007, CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

CONFLICT - Ward 9 Councillor Brad Clark

Due to a declared conflict, Item 9, was voted on separately as follows:

- 9. Appeal to the Ontario Land Tribunal (OLT) for Refusal of an HCA Permit for Lands Located at 140 Garner Road East (Ancaster) (OLT-21-001567) (LS22020/PED22096(a)) (Ward 12) (Added Item 14.2)
 - (a) That the directions to staff in closed session respecting Report LS22020/ PED22096(a) be released to the public, following approval by Council;
 - (b) That the balance of Report LS22020/PED22096(a) remain confidential.

Result: Motion on Item 9 of the balance of Planning Committee Report 22-007, CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

NOT PRESENT - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

CONFLICT - Ward 9 Councillor Brad Clark

Result: Motion on the balance of Planning Committee Report 22-007, CARRIED by a vote of 14 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

GENERAL ISSUES COMMITTEE REPORT 22-009

(Wilson/Pearson)

That General Issues Committee Report 22-009, being the meeting held on Wednesday, May 4, 2022, be received and the recommendations contained therein be approved.

6. Open Streets Temporary Linear Urban Park (PED22075) (City Wide) (Item 10.3)

(Eisenberger/Clark)

That Item 6 (g) of General Issues Committee Report 22-009, respecting Open Streets Temporary Linear Urban Park)PED22075), be **amended** to include '**and report back to the General Issues Committee for consideration'**, as follows:

(g) That, prior to the implementation of any Open Streets Temporary Linear Urban Park, staff be directed to an provide opportunity for direct resident engagement to include, but not be limited to, the use of Engage Hamilton to invite residents along the King Street stretch to comment on this matter, and report back to the General Issues Committee for consideration.

Result: Amendment to Item 6 (g) of the General Issues Committee Report 22-009, CARRIED by a vote of 14 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

Result: Motion on the General Issues Committee Report 22-009, *As Amended,* CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

NOT PRESENT - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

EMERGENCY AND COMMUNITY SERVICES COMMITTEE REPORT 22-007

(Clark/Merulla)

That Emergency and Community Services Committee Report 22-007, being the meeting held on Thursday, May 5, 2022, be received and the recommendations contained therein be approved.

Result: Motion on the Emergency and Community Services Committee Report 22-007, CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

NOT PRESENT - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

(Wilson/Nann)

That Council rise from Committee of the Whole to consider the Committee Reports.

Result: Motion CARRIED by a vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

NOT PRESENT - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

MOTIONS

6.1 Reaffirming Council's Position on the Amendments Required to the *Highway Traffic Act*, to Include Right-of-Way Legislation for Pedestrians

(Merulla/Danko)

WHEREAS, Council on November 13, 2013 requested that the Province of Ontario amend the Highway Traffic Act, to include right-of-way legislation for pedestrians, in order to create a complete streets environment; and

WHEREAS, the City of Hamilton is currently seeing a high volume of accidents involving automobiles and pedestrians.

THEREFORE, BE IT RESOLVED:

That Council reaffirm their previous request for the Province of Ontario to amend the *Highway Traffic Act*, to include right-of-way legislation for pedestrians.

Result: Motion CARRIED by a vote of 14 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

6.2 Safety Enhancements to Major Arterial Roads

(Wilson/Nann)

WHEREAS, 10 people have been killed and many others have suffered serious injury from collisions on Hamilton's streets since January 2022;

WHEREAS, the City of Hamilton's annual collision report provides statistical data on all reported collisions on City of Hamilton roads during a five-year period;

WHEREAS, there have been 70 fatal incidents, including 26 pedestrians and 2 cyclists over the past five years (2017-2021) on Hamilton streets because of collisions;

WHEREAS, the annual collision report reveals an over representation of fatal and injury collision along Main and King Streets in Hamilton;

WHEREAS, the Multi-Modal Transportation focus area under the Term of Council Priorities 2018 – 2022, it is identified that safety measures will be built in to ensure road safety for all road users in-line with the principles of a Vision Zero strategy;

WHEREAS, in 2019 Hamilton City Council approved the City of Hamilton Vision Zero Action Plan 2019-2025 which identifies that fatalities and serious injuries on our roads are preventable and that no loss of life is acceptable;

WHEREAS, Hamilton City Council voted unanimously in support of a Vision Zero Action plan which states that our city's street designs should minimize risk to all users, especially vulnerable users such as children, older adults and people with disabilities;

WHEREAS, the implementation of LRT in the Main-King-Queenston corridor will transform our city and act as a catalyst for re-prioritizing road space with a focus on pedestrians;

WHEREAS, Hamilton City Council voted unanimously to apply equity, diversity and inclusion principles to all city actions and practices, including transportation design, operations and capital funding;

WHEREAS, Hamilton City Council unanimously declared a climate emergency that committed the municipality to prioritizing climate action and sustainability;

WHEREAS, equitable mobility means that all residents have an opportunity to move around reliably and safely regardless of their abilities, income, race, gender, postal code and means of transportation;

WHEREAS, the removal of unsafe conditions created by the existing design and operation of Main and King Streets would support healthy lives, social development, economic opportunities and civic participation for all Hamilton residents;

WHEREAS, Complete Streets is an approach to planning, design, building, operating and maintaining streets that enable safe access for all people who need to use them;

WHEREAS, the Hamilton Police Service have publicly reported that the structural redesign of Main and King is necessary to address the sustained pattern of fatalities and injuries; and

WHEREAS, the City must honour its stated commitments to safety, accessibility, equity, mitigating the impact of climate change to create a healthier, more liveable and prosperous city.

THEREFORE, BE IT RESOLVED:

- (a) That staff identify actions that can be taken immediately to improve safety for all users along Main Street and King Street such as expanded and enhanced pedestrian space, temporary lane reductions, removal of parking restrictions, reduced speed limit, synchronized traffic signal options, no right turn on red restrictions at intersections, and leading pedestrian intervals;
- (b) That the conversion of Main Street from one-way to two-way be approved as an immediate safety intervention and that an implementation plan be developed for the conversion of Main Street from one-way to two-way that integrates a Complete Streets redesign that will enable safer use for all people who need to use the streets including public transit riders, pedestrians, motorists and cyclists and that these spaces also contribute to climate resilience by providing shade trees and permeable surfaces;
- (c) That staff be directed to undertake engagement with the public and advisory committees on the medium- and long-term vision of Main Street that leverages a Complete Streets, EDI and Climate Change approach;
- (d) That staff consult with Metrolinx and the Ministry of Transportation on the implications of the implementation plan on LRT and Highway 403 interchanges;
- (e) That staff report back in early 2023 with an implementation plan for the twoway conversion of Main Street that includes an assessment of costs, construction timing and resource requirements;
- (f) That the City retain a consultant to prepare the implementation plan for Main Street funded from Vision Zero Priorities Capital Budget (#4662020050) at an upset limit of \$400,000; and

(g) That staff update and reassess all remaining one-way streets in the City of Hamilton utilizing the street conversion framework identified in the Transportation Master Plan and report back to Council.

Upon Council's request, sub-section (b) of Item 6.2 was voted on separately, as follows:

(b) That the conversion of Main Street from one-way to two-way be approved as an immediate safety intervention and that an implementation plan be developed for the conversion of Main Street from one-way to two-way that integrates a Complete Streets redesign that will enable safer use for all people who need to use the streets including public transit riders, pedestrians, motorists and cyclists and that these spaces also contribute to climate resilience by providing shade trees and permeable surfaces;

Result: Motion on sub-section (b) of Item 6.2 CARRIED by a vote of 12 to 2, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

NO - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

NO - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

Result: Motion on the balance of the Item 6.2 CARRIED by a vote of 13 to 1, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

NO - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

6.3 Banning Hate Symbols

(Eisenberger/Johnson)

WHEREAS, Council voted to ban expressions and symbols associated with hate from public property within the City's jurisdiction August 9,2021.

WHEREAS, Council at its meeting of June 23rd, 2021 endorsed Private Member's Bill C-313 *Banning Symbols of Hate Act.*

WHEREAS, the 43rd Parliament was dissolved on August 15th, 2021, bringing to an end all proceedings and bills before Parliament.

WHEREAS, Bill C-229 An Act to amend the Criminal Code (banning symbols of hate) was introduced for First Reading on February 3, 2022; and

WHEREAS, hateful symbols cause community and individual harm.

THEREFORE, BE IT RESOLVED:

- (a) That Hamilton City Council endorse Bill C-229, An Act to amend the Criminal Code (banning symbols of hate).
- (b) That Council requests the federal and provincial governments act swiftly to take action to ban symbols of hate.
- (c) That the Federal Government develop legislation that would clarify and strengthen the definition of hate speech and symbols; and work with all orders of government in addressing the root causes of hate speech; and
- (d) That the Provincial Government enact legislation to enable municipalities to make enforceable decisions regarding symbols deemed unacceptable by the local community; including a review of statutes where hate speech may be identified as illegal.

Result: Motion CARRIED by a vote of 14 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

NOTICES OF MOTION

7.1 Reaffirming Council's Position on the Amendments Required to the *Highway Traffic Act*, to Include Right-of-Way Legislation for Pedestrians

(Merulla/Danko)

That the rules of order be waived to allow for the introduction of a Motion respecting Reaffirming Council's Position on the Amendments Required to the *Highway Traffic Act*, to Include Right-of-Way Legislation for Pedestrians.

Result: Motion CARRIED by a 2/3rds vote of 13 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

NOT PRESENT - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

For further disposition of this matter, refer to Item 6.1

7.2 Safety Enhancements to Major Arterial Roads

(Wilson/Nann)

That the rules of order be waived to allow for the introduction of a Motion respecting Safety Enhancements to Major Arterial Roads.

Result: Motion CARRIED by a 2/3rds vote of 14 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

For further disposition of this matter, refer to Item 6.2

The Mayor relinquished the Chair to Deputy Mayor Wilson, in order to move the following motion:

7.3 Banning Hate Symbols

(Eisenberger/Johnson)

That the rules of order be waived to allow for the introduction of a Motion respecting the Banning of Hate Symbols.

Result: Motion CARRIED by a 2/3rds vote of 14 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

YES - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

For further disposition of this matter, refer to Item 6.3

Mayor Eisenberger assumed the Chair for the remainder of the meeting.

STATEMENTS BY MEMBERS

Members of Council used this opportunity to discuss matters of general interest.

COUNCIL COMMUNICATION UPDATES

(Wilson/Eisenberger)

That the listing of Council Communication Updates from April 22, 2022 to May 5, 2022, be received.

Result: Motion CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

NOT PRESENT - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

NOT PRESENT - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

PRIVATE AND CONFIDENTIAL

Council determined that discussion of Item 10.1 was not required in Closed Session; therefore, the matter was addressed in Open Session, as follows:

10.1 Closed Session Minutes – April 27, 2022

(Powers/Ferguson)

That the Closed Session Minutes dated April 27, 2022 be approved, as presented, and remain confidential.

Result: Motion CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

NOT PRESENT - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

NOT PRESENT - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

BY-LAWS AND CONFIRMING BY-LAW

(Wilson/Clark)

That Bills No. 22-108 to 22-117, be passed and that the Corporate Seal be affixed thereto, and that the By-laws, be numbered, be signed by the Mayor and the City Clerk to read as follows:

- A By-law to Amend By-law No. 12-031, a By-law for Responsible Animal Ownership and to Repeal By-law No. 12-220
 - Ward: 2, 4, 12
- To Amend By-law No. 01-218, as amended, Being a By-law to Regulate On-Street Parking

Schedule 6 (Time Limit Parking)

Schedule 8 (No Parking Zones)

Schedule 12 (Permit Parking Zones)

Schedule 13 (No Stopping Zones)

Schedule 14 (Wheelchair Loading Zones)

Ward: 2, 3, 4, 7, 12, 13

110 Respecting Removal of Part Lot Control, Part of Block 1, Registered Plan No. 62M1283, municipally known as 1288 Baseline Road, Stoney Creek PLC-22-004

Ward: 10

- To Amend By-law No. 21-207, being a By-law to Regulate Public Notices at Infill Constructions Sites
 Ward: City Wide
- 112 Respecting the Appointments of a Chief Building Official, Deputies and Inspectors, and to Repeal By-law No. 22-041 Ward: City Wide
- 113 To Amend Zoning By-law No. 05-200 Respecting Lands Located at 9270 Haldibrook Road ZAA-22-006

Ward: 11

114 To Amend Zoning By-law No. 05-200, Respecting Lands Located at 1640 Trinity Church Road, Glanbrook ZAA-22-010

Ward: 11

To Amend Zoning By-law No. 3581-86, Respecting Lands Located at 71 Main Street and 10 Baldwin Street, Dundas

ZAH-21-037 Ward: 13

To Permanently Close and Sell a Portion of Pinot Crescent, Stoney Creek, namely Part of Pinot Crescent, Plan 62M-1241, City of Hamilton, designated as Parts 1, 2 and 3 on 62R-21878; City of Hamilton

Ward: 10

117 To Confirm the Proceedings of City Council

Result: Motion CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

NOT PRESENT - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson

YES - Ward 11 Councillor Brenda Johnson

NOT PRESENT - Ward 10 Councillor Maria Pearson

YES - Ward 9 Councillor Brad Clark

(VanderBeek/Pauls)

That, there being no further business, City Council be adjourned at 12:56 p.m.

Result: Motion CARRIED by a vote of 12 to 0, as follows:

YES - Deputy Mayor - Ward 1 Councillor Maureen Wilson

NOT PRESENT - Ward 2 Councillor Jason Farr

YES - Ward 3 Councillor Nrinder Nann

NOT PRESENT - Ward 4 Councillor Sam Merulla

YES - Ward 5 Councillor Russ Powers

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Mayor Fred Eisenberger

YES - Ward 15 Councillor Judi Partridge

NOT PRESENT - Ward 14 Councillor Terry Whitehead

YES - Ward 13 Councillor Arlene VanderBeek

YES - Ward 12 Councillor Lloyd Ferguson YES - Ward 11 Councillor Brenda Johnson NOT PRESENT - Ward 10 Councillor Maria Pearson YES - Ward 9 Councillor Brad Clark

Respectfully submitted,

Mayor Fred Eisenberger

Andrea Holland City Clerk



Ministry of the and Parks

Ministère de l'Environnement, Environment, Conservation de la Protection de la nature

et des Parcs

Branch

Environmental Assessment Direction des évaluations environnementales

1st Floor Rez-de-chaussée

135 St. Clair Avenue W 135, avenue St. Clair Ouest Toronto ON M4V 1P5 Toronto ON M4V 1P5 **Tel.**: 416 314-8001 **Tél.**: 416 314-8001 Fax.: 416 314-8452 **Téléc.**: 416 314-8452

April 22, 2022

MEMORANDUM

TO: Government Review Team List

FROM: Anne Cameron

Project Officer

Environmental Assessment Branch

RE: Biggars Lane Landfill Expansion Environmental Assessment

NŎŤICE OF APPROVAL

EA File No. EA-03-08-02, EAIMS No. 14119

Approval to proceed with the above undertaking has now been granted, and a copy of the Notice of Approval is attached.

I would like to thank you for your assistance with the review of the environmental assessment.

Anne Cameron

Attachment

Matthew D'Hondt, Solid Waste / Wastewater Operations Manager, County of Brant C:

ENVIRONMENTAL ASSESSMENT ACT

SECTION 9

NOTICE OF APPROVAL TO PROCEED WITH THE UNDERTAKING

RE: An Environmental Assessment for the Biggars Lane Landfill Expansion

Proponent: County of Brant

EA File No.: 03-08-02 EA Reference No.: 14119

TAKE NOTICE that the period for requesting that the application or matters related to the application be referred to the Ontario Land Tribunal for a hearing, provided for in the Notice of Completion of the Review for the above-noted undertaking, expired on January 14, 2022. I received no submissions requesting a hearing by the Ontario Land Tribunal before the expiration date.

Having considered the purpose of the *Environmental Assessment Act*, the approved terms of reference, the environmental assessment, the ministry review of the environmental assessment and submissions received, I hereby give approval to proceed with the undertaking, subject to conditions set out below.

REASONS

My reasons for giving approval are:

- (1) The proponent has complied with the requirements of the *Environmental Assessment Act*.
- (2) The environmental assessment has been prepared in accordance with the approved Terms of Reference.
- (3) On the basis of the proponent's environmental assessment and the ministry review, the proponent's conclusion that the advantages of this undertaking outweigh its disadvantages appears to be valid.

- (4) The proponent has demonstrated that the environmental effects of the undertaking can be appropriately prevented, changed, mitigated or remedied.
- (5) On the basis of the proponent's environmental assessment, the ministry review and the conditions of approval, the construction, operation and maintenance of the undertaking will be consistent with the purpose of the *Environmental Assessment Act*.
- (6) The ministry's review of government agency, public and Indigenous Community comments on the environmental assessment and the ministry review has indicated no outstanding concerns that cannot be addressed through commitments in the environmental assessment, through the conditions set out below or through future approvals that will be required.
- (7) I am not aware of any outstanding issues with respect to this undertaking which suggest that a hearing should be required; as such, a hearing is unnecessary and would cause undue delay to the implementation of the undertaking.

CONDITIONS

Approval to proceed with the undertaking is subject to the following conditions:

1. Definitions

For the purposes of these conditions:

"construction" means physical construction activities, including site preparation works, but does not include the tendering of contracts.

"Date of Approval" means the date on which the Order in Council pertaining to the approval of the undertaking was signed by the Lieutenant Governor in Council.

"Director" means the Director of the Environmental Assessment Branch.

"District Manager" means the Manager of the ministry's Guelph District Office.

"environmental assessment" means the document titled Biggars Lane Landfill Expansion Environmental Assessment, dated January 2021, and submitted to the ministry on February 15, 2021.

"Environmental Compliance Approval" means an approval issued under Part II.1 of the Environmental Protection Act.

"ministry" means the Ministry of the Environment, Conservation and Parks.

"program" means compliance monitoring program.

"proponent" means the County of Brant.

"**site**" means the Biggars Lane Landfill located at 128 Biggars Lane in the County of Brant.

"undertaking" means the planning, design, construction, and operation of a horizontal expansion of the Biggars Lane Landfill to provide an additional waste disposal capacity of 1.13 million cubic metres for solid non-hazardous municipal waste and industrial, commercial, and institutional waste.

2. General Requirements

- 2.1 The proponent shall implement the undertaking in accordance with the environmental assessment, which is hereby incorporated into this Notice of Approval by reference, except as provided in the conditions of this Notice of Approval and as provided in any other approval or permit that may be issued for this site.
- 2.2 Should the proponent wish to make changes to any document required by these conditions after the document has been accepted or approved by the ministry, the proponent shall obtain the written approval for the proposed changes from the ministry decision-maker in the condition requiring the document.
- 2.3 For any document required by these conditions to be prepared, submitted and/or posted publicly by the proponent, the Director may determine that the proponent is no longer required to prepare, submit or post the document. The Director shall provide written notice of the decision to the proponent. Until such time as the proponent has received written notice from the Director, the proponent must continue to prepare, submit and/or post the document as required by the conditions.
- 2.4 The conditions of the Notice of Approval do not prevent more restrictive conditions being imposed under other statutes.

3. Public Record and Submission of Documents

- 3.1 Where a document is required to be submitted, the proponent shall provide one hardcopy and an electronic copy of the document to the Director.
- 3.2 The environmental assessment Reference Number 14119 and File Number 03-08-02 shall be quoted on all documents submitted to the ministry pursuant to this Notice of Approval.
- 3.3 For every document submitted to the ministry, the proponent shall clearly identify which condition of approval the document is meant to fulfill.

4. Compliance Monitoring Program

- 4.1 The proponent shall prepare and submit to the Director for approval an environmental assessment compliance monitoring program.
- 4.2 The compliance monitoring program shall be submitted to the Director up to one year from the Date of Approval or such other date agreed upon by the Director in writing.

- 4.3 The compliance monitoring program shall include a description of how the proponent will:
 - a. monitor implementation of the undertaking in accordance with the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out;
 - b. monitor compliance with the conditions in this Notice of Approval; and
 - c. monitor compliance with all commitments made in the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out.
- 4.4 The compliance monitoring program shall include an implementation schedule for monitoring activities to be completed.
- 4.5 The Director may require the proponent to amend the compliance monitoring program at any time. Should an amendment be required, the Director will notify the proponent in writing of the required amendment and the date by which the proponent must complete and submit the amendment to the Director.
- 4.6 The proponent shall submit the amended compliance monitoring program to the Director within the time period specified by the Director in the written notice.
- 4.7 The proponent shall implement the compliance monitoring program, including any amendments to it.
- 4.8 The approved compliance monitoring program and any amended compliance monitoring program shall be included as part of the public record.

5. Compliance Reporting

- 5.1 The proponent shall prepare an annual compliance report outlining the results of the compliance monitoring program (Condition 4 above) and the report shall be included as part of the public record.
- 5.2 The first compliance report shall be submitted to the Director for review and included in the public record no later than one year following the Date of Approval. Each subsequent annual compliance report shall be submitted to the ministry for review and be included in the public record on the date that is the anniversary of the Date of Approval thereafter or such other date as agreed to by the Director. Each report shall cover the previous year.
- 5.3 The proponent shall submit annual compliance reports until all conditions in this Notice of Approval are satisfied.
- 5.4 The proponent shall notify the Director in writing when the final annual compliance report is being submitted. The ministry will confirm whether all conditions have been satisfied in writing to the proponent.

- 5.5 The proponent shall retain, either on the site or in another location approved by the Director, copies of the annual compliance reports for each reporting year and any associated documentation regarding compliance monitoring activities.
- 5.6 The proponent shall make the compliance reports and associated documentation available to the Director or a designate in a timely manner when requested to do so by the ministry.

6. Complaint Protocol

- 6.1 The proponent shall prepare a complaint protocol for addressing inquiries and complaints during all stages of the undertaking. The complaint protocol shall include a procedure for notifying the District Manager of any complaints received by the proponent.
- 6.2 The proponent shall submit the complaint protocol to the Director for approval at least 60 days before the start of construction or such other date agreed to by the Director in writing.
- 6.3 The Director may require the proponent to amend the complaint protocol at any time. Should an amendment be required, the Director shall notify the proponent in writing of the amendment required and when the amendment must be completed.
- The proponent shall submit an amended complaint protocol to the Director within the time period specified by the Director.
- 6.5 The proponent shall implement the complaint protocol and any amendments to it.
- 6.6 The approved complaint protocol and any amended complaint protocol shall be included as part of the public record.

7. Odour

- 7.1 The proponent shall submit to the Director of the Environmental Permissions Branch either (i) at the time of submission of their application under Part II.1 of the *Environmental Protection Act* or (ii) during detailed design an Odour Best Management Practices Plan or updated plan if a plan has already been prepared for the existing site. The Odour Best Management Practices Plan or updated plan must be prepared following the ministry's technical bulletin "Best Management Practices for Industrial Sources of Odour". The Odour Best Management Practices Plan or updated plan must be updated and maintained in accordance with the technical bulletin.
- 7.2 The proponent shall verify the odour estimates/assumptions in the environmental assessment with an odour sampling program that meets the requirements of paragraph 2 of subsection 11(1) in O. Reg. 419/05 made under the *Environmental Protection Act*. Sampling must be conducted before the start of construction to document existing odour conditions and following construction to confirm the impact of the project on odour and to ensure the site is in compliance

with ministry odour guidelines. The proponent shall submit to the Director of the Environmental Permissions Branch the pre-expansion sampling and dispersion modelling results either (i) at the time of submission of their application under Part II.1 of the *Environmental Protection Act* or (ii) during detailed design.

8. Archaeological Assessment

8.1 The proponent shall prepare and submit to the Ministry of Heritage, Sport,
Tourism and Culture Industries for review a Stage 3 Archaeological Assessment
during the detailed design stage if construction occurs within proximity of the
existing archaeological site identified in the Stage 2 Archaeological Assessment.
The Stage 3 Archaeological Assessment should indicate if a Stage 4
Archaeological Assessment is required.

9. Changes/Amendments

9.1 The proponent shall implement any changes to the undertaking in accordance with the Act including the waste screening process under the Waste regulation as may be applicable.

10. Duration of Approval

10.1 If construction of the undertaking has not commenced within 10 years of the Date of Approval, this Notice of Approval expires and the undertaking may not proceed pursuant to this Notice of Approval unless this expiry is otherwise extended by the Director.

Dated the	6	day of	April	2022 at TORONTO.
				Joed in
				Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto ON M7A 2J3
Approved by	O.C. No.	996 / 2022	2	
Date O.C. Ap	oproved	_April 14, 20	22	<u> </u>

Subject: Bluebelt + Grand River: A Treaty Restoration Project

From: Secretary-General Benjamin Doolittle U.E. <benjamin.doolittle@mohawkuniversity.org>

Sent: Thursday, May 5, 2022 3:32 PM

Subject: Bluebelt + Grand River: A Treaty Restoration Project

Hello all,

My name is Benjamin Doolittle UE, Secretary-General for the Mohawk Nation of the Grand River Country ("Mohawk University"), I am a fraternal member of the Sha'tekari:wate; one of nine sub-clans of the Mohawk Confederacy. I am writing to introduce myself and our project, BlueBelt + Grand River, The Haldimand Tract Land Trust Conservancy. (www.bluebelt.org)

Promised to the Mohawk descendants of the old villages of Canojaharie, Tikondarago, and Aughugo and their posterity to enjoy forever. The Haldimand Tract is 950,000 acres or 3,844 square kilometers. The Grand River watershed is the largest inland river system in Oniatarí:io ("beautiful lake"). It has a total area of 6,800 square kilometers. This acquired territory extends to the mouth of the Lake Erie shoreline establishing riparian rights.

BlueBelt + Grand River, The Haldimand Tract Land Trust Conservancy is commissioned by The Mohawk Charitable Foundation for Grand River and learning organization ("Mohawk University"). The first charitable foundation to be formed under the jurisdiction of the Mohawk Nation of Grand River Country. The Trust is managed by Mohawk University for the benefit of the U.E.L. (Loyalist) Mohawk Descendants.

The Mohawk Charitable Foundation for Grand River and learning organization ("Mohawk University") exists to provide services to its members; and to enter into mutually beneficial relationships with other charitable foundations, non-member persons, states, and other parties.

The Charitable Foundation is a non-incorporated, pre-Columbian longbody existing within the metes and bounds of A'nowara'ko:wa (Great Turtle Island), for greater certainty but not limited to the Grand River Country ("Haldimand Province"). The first charitable foundation was formed under the jurisdiction of the Mohawk Nation of Grand River Country.

The Mohawk University provides services to all members and non-members under its jurisdiction until another Mohawk Nation foundation becomes ratified, at such point any Mohawk Nation members beyond the Grand River would come under the jurisdiction of their own respective Mohawk Nation foundation.

The directors of the Mohawk University welcome any interest and look forward to a further expansion of the Mohawk Nation.

Please find (3) attached documents:

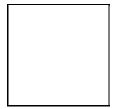
- 1. Mission and Vision Statement Bluebelt
- 2. Conservation and Stewardship Bluebelt
- 3. Haldimand Tract Bluebelt

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Sincerely, Secretary-General Benjamin Doolittle U.E. Office of Secretary-General for the Mohawk Nation of Grand River Country Mohawk Domain [Without Canada]



The Office of Secretary-General for the Mohawk Nation of Grand River Country ("MOHAWK UNIVERSITY")





BlueBelt + Grand River Conservation and Stewardship, A Haldimand Treaty Restoration Project

Promised to the Mohawk descendants of the old Villages of Canojaharie, Tikondarago, and Aughugo and their posterity to enjoy forever. The Haldimand Tract is 950,000 acres or 3,844 square kilometers. The Grand River watershed is the largest inland river system in Oniatarí:io ("beautiful lake"). It has a total area of 6,800 square kilometers. This acquired territory extends to the mouth of the Lake Erie shoreline establishing riparian rights.

Land conservancies, also known as land trusts, are community-based, nonprofit organizations dedicated to the permanent protection and stewardship of natural and working lands for the beneficiaries and public good.

Land conservancies are positioned to act swiftly and professionally to help landowners and communities protect the endangered places important to us all—open spaces that define our sense of place, connect us to the natural world, and provide real services such as water quality protection, wildlife habitat, outdoor recreation, and agri-sources of food and timber.

How does a Land Conservancy Work? Land conservancies are better suited than any other organization to safeguard Grand River's natural beauty and the conservation values of our most important lands. To do this, land conservancies use the following suite of tools to protect and steward land forever:

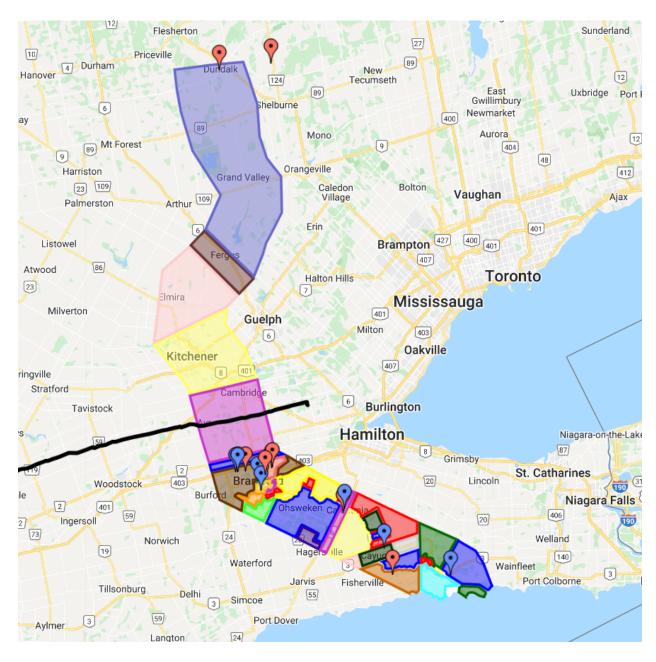
- Nature Preserves or Sanctuaries Haldimand Tract Lands are acquired through reversion, repossession, and expropriation, donation or purchase to be used as a nature preserve or sanctuary. Often, these lands are open to the general public to visit and enjoy.
- **Conservation Easements** A voluntary legal tool that allows the land to remain in private ownership but permanently limits development to protect the conservation values of the property.
- Government Assists Conservancies often help local communities or the Mohawk University acquire public parkland and open space. Assistance can range from grant writing support to leading fundraising campaigns.
- Stewardship For the lands that are owned and managed by conservancies or for the
 conservation easements they hold, stewardship is the term used for ongoing management and
 monitoring to protect the conservation values of those properties.
- Education Whether providing education to landowners about conservation options or engaging
 community members in the stewardship of natural areas, conservancies educate people about
 the values of participating within our own natural environment.

How do you inherently participate within your own environments? "Karén:na" The Mohawk name of the force, principle, or magic power which is ... to be inherited in everybody and being in nature and in every personified attribute, property, or activity, belonging to each of these and conceived to be the active cause or force, or dynamic energy, involved in every operation or phenomenon of nature, in any manner affecting or controlling the welfare of man.

BlueBelt + Grand River, The Haldimand Tract Land Trust Conservancy is commissioned by The Mohawk Charitable Foundation for Grand River and learning organization ("Mohawk University"). The first charitable foundation to be formed under the jurisdiction of the Mohawk Nation of Grand River Country. The Trust is managed by Mohawk University for the benifit of the U.E.L. Mohawk Descendants. info@bluebelt.org www.bluebelt.org



Haldimand Tract



This map seeks to outline the territory of the Haldimand Tract ('Province") as set out in the acquisition of territory by the Haldimand Proclamation of 1784 and the recent struggles to fight off the alien occupying

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forces government, known collaborators, and land developers planning to profit on stolen lands. The interactive map divides the Haldimand Province into smaller tracts based on the history of land theft orchestrated by alien residents and occupying foreign governments.

The expression 'acquisition of territory' is usually employed as meaning the establishment of sovereignty over a given piece of land. Well-known UN Security Council resolutions refer to 'acquisition of territory' in this manner, notably Resolution 242 (1967). The expression, however, requires some precision. First, strictly speaking, 'territory' as a term of art comprises not only emerged land, but also airspace, the territorial sea, and internal waters.

BlueBelt + Grand River, The Haldimand Tract Land Trust Conservancy is a direct response to the encroachments of the Haldimand tract, intensified by preservation projects of the greenbelt that directly promotes rampant development within the Haldimand tract. The greenbelt rests alongside the Haldimand tract straddling boundaries.

The Haldimand Tract Land Trust Conservancy services the Haldimand Province under a claim of right to peaceable possession of the Haldimand Tract under operation of a formal treaty known as the Haldimand Proclamation, a sacrosanct agreement. BlueBelt + Grand River is empowered by Mohawk University.



Mission and Vision Statement

The Haldimand Tract Land Trust Conservancy ("BlueBelt + Grand River") gets its name and geographic boundaries from the days of early Mohawk settlement in acquired territories along the Grand River and granting of the Haldimand Tract to Tyendanaga (Colonel Joseph Brant UEL) of the Mohawk Nation for the benefit of the Loyalist Mohawk descendants forever in perpetuity.

Mission

The mission of Haldimand Tract Land Trust Conservancy is to protect, care for, and connect people to the extraordinary lands that make this area special.

The Haldimand Tract Land Trust Conservancy protects the scenic, natural, agricultural, and open landscapes of Grand River for the benefit of the community and future generations by:

- Developing long-term land protection strategies;
- Promoting private and public funding for land conservation;
- Acquiring land and conservation easements;
- Practicing stewardship, including the restoration of conservation properties; and
- Promoting a sense of place and a land ethic through activities, education, and outreach.

Vision

We see a future where the wild and working forests, the rivers and wetlands, the globally unique biotic habitats, and the Grand River's rich farming and indigenous heritage—those things that define the extraordinary place we call Grand River Country—are preserved *forever*, are lovingly cared for by supportive communities and are cherished by all as an extraordinary gift that generations before has made to future generations.

We will support our vision through a variety of strategies including:

- Work with landowners, resource agencies, and other conservation organizations, to preserve the prime agricultural lands, open spaces, and wetland habitats of the Grand River watershed.
- Perform conservation activities that will result in improved health of the vital watersheds and water resources of Grand River Country and positively impact our natural places through rehabilitation.
- Collaborate with landowners, resource agencies, and other conservation organizations to protect
 the entire ecosystem contained within the Haldimand Province, situated between the Lakes
 Ontario, Erie, and Huron.
- Implement a process for refreshing and re-evaluating our Vision so that it continually reflects the values of our community and honors the perpetual nature of the organization.

BlueBelt + Grand River, The Haldimand Tract Land Trust Conservancy is commissioned by The Mohawk Charitable Foundation for Grand River and learning organization ("Mohawk University"). The first charitable foundation to be formed under the jurisdiction of the Mohawk Nation of Grand River Country. The Trust is managed by Mohawk University for the benifit of the U.E.L. Mohawk Descendants. info@bluebelt.org www.bluebelt.org

- Conduct conservation activities that will lead to greater opportunities for people to directly experience the spectacular and diverse landscapes of Grand River Country.
- Create and maintain easement monitoring programs, land management practices, and landowner partnerships that will be considered among the best in the world.
- Develop and sustain a robust financial reserve that ensures that we can continue to provide
 excellent stewardship of our lands in perpetuity and will be able to move quickly to acquire key
 parcels when opportunities arise.
- Become a recognized conservation leader, and model for other land trusts seeking to protect critical habitat, managed forests, agricultural, open spaces, and wetlands.



Ministry of Northern Development, Mines, Natural Resources and Forestry

Resources Planning and Development Policy Branch Policy Division 300 Water Street Peterborough, ON K9J 3C7 Ministère du Développement du Nord, des Mines, des Richesses Naturelles et des Forêts

Direction des politiques de planification et d'exploitation des ressources Division de l'élaboration des politiques 300, rue Water Peterborough (Ontario) K9J 3C7

Subject: Decision Notice - Proposed Regulation Changes under the Aggregate Resources Act

Greetings,

Further to my letter dated January 11th, I am writing to inform you that a decision notice has been posted regarding the Proposed regulatory changes for the beneficial reuse of excess soil at pits and quarries in Ontario (ERO #019-4801). The Ministry of Northern Development, Mines, Natural Resources and Forestry made changes so that requirements in <u>Ontario Regulation 244/97</u> under the <u>Aggregate Resources Act</u> are consistent with provincial requirements that exist under the <u>Environmental Protection Act</u> for excess soil. The proposal was posted for 45 days and during that time we received over 390 comments from key stakeholders including industry, municipalities, Indigenous communities, community groups and individuals. Most comments received were supportive of consistency with the <u>Rules for Soil Management and Excess Soil Quality Standards</u> referenced in the <u>On-site and Excess Soil Management Regulation under the Environmental Protection Act</u>.

The amendments to *Ontario Regulation 244/97*, which take effect July 1, 2022, include:

- Alignment with the Soil Rules and Excess Soil Standards referenced in Ontario Regulation 406/19 On-site and Excess Soil Management
- Requirements for importation, storage, and placement of excess soil
- Specific quality standards for excess soil placed below the water table, or on Crown land
- Record-keeping requirements to document soil quality, quantity, source site(s), and final placement
- Requirements for licensees and permittees to retain a Qualified Person (i.e., professional engineer or geoscientist) for large sites that import more than 10,000 m³ of excess soil, or sites where excess soil will be placed below the water table
- Self-filing for licences/permits approved before July 1, 2022, rules have been added that, when followed, enable some conditions to be removed from a site plan when filed with the ministry; and
- Other policy changes to support the beneficial reuse of excess soil at pits and quarries in Ontario

For complete details of these changes please refer to the decision notice posted on the Environmental Registry at the following address: www.ero.ontario.ca; then search for notice: **019-4801**.

If you have any questions about the new requirements, or should you require a French version of this letter, please contact us by email at aggregates@ontario.ca.

Sincerely

Jennifer Keyes,

Jenih Key

Director, Resources Planning and Development Policy Branch

Subject:

Environment and Climate Change Canada Recovery Planning Document on the Species at Risk Public Registry / Document de planification du rétablissement d'Environnement et Changement climatique Canada dans le Registre public des espèces en péril

From: EEP Ontario / SAR Ontario (ECCC) < SpeciesatRisk.Ontario@ec.gc.ca >

Sent: Tuesday, May 3, 2022 3:28 PM

To: EEP Ontario / SAR Ontario (ECCC) <SpeciesatRisk.Ontario@ec.gc.ca>

Subject: Environment and Climate Change Canada Recovery Planning Document on the Species at Risk Public Registry / Document de planification du rétablissement d'Environnement et Changement climatique Canada dans le Registre public des espèces en péril

On March 17, 2022, Environment and Climate Change Canada posted the following recovery planning document on the Species at Risk (SAR) Public Registry:

The following document is now posted as proposed on the Public Registry and is open for a 90-day comment period:

• Recovery Strategy for the Chimney Swift (*Chaetura pelagica*) in Canada [Proposed version]:

Recovery Strategy for the Chimney Swift (Chaetura pelagica) in Canada - Public consultation search Species at risk registry

For more information on the *Species at Risk Act*, recovery planning documents and species at risk, please visit the *SAR Public Registry* at: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html.

If you have any comments or questions about the recovery planning document, please contact the Consultation Biologist at:

Canadian Wildlife Service - Ontario Environment and Climate Change Canada 4905 Dufferin Street Toronto, ON M3H 5T4

E-mail: SpeciesAtRisk.Ontario@ec.gc.ca

This email message has been sent with the purpose of sharing information about proposed amendments to Schedule 1 of the Species at Risk Act and/or recovery document postings (including the public comment periods) on the Species at Risk Public Registry: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html

For more information, or if this message was forwarded to you and you would like to be added to this email list, or if you do not wish to be included in future messages, please email SpeciesAtRisk.Ontario@ec.gc.ca directly with 'add to (or remove from) list' in the subject line.

PO Box 488 201 Atwood Avenue Rainy River, ON P0W 1L0



Town of Rainy River

Office Phone: (807) 852-3244 Clerk Phone: (807) 852-3978

Fax: (807) 852-3553 Email: rainyriver@tbaytel.net Website: www.rainyriver.ca

4.5

RESOLUTION

MOVED BY
"WHEREAS Section 21 of the <i>Public Transportation and Highway Improvement Act</i> allows the Minister of Transportation to designate a highway or part of a highway as a connecting link between parts of the King's Highway or as an extension of the King's Highway, to be constructed and maintained by the road authority having jurisdiction over the highway or part of the highway;
AND WHEREAS the Ministry of Transportation (MTO) Connecting Link Program does not provide sufficient funding to adequately provide for the high cost of maintaining these Connecting Links;
AND WHEREAS this may lead to hazardous road conditions;
AND WHEREAS these Connecting Links were once maintained by the Province of Ontario;
NOW THEREFORE BE IT RESOLVED THAT care and maintenance of these Connecting Links in small or rural municipalities, such as the 2.70 km of Atwood Avenue (Highway 11) in Rainy River, be returned to the MTO.
AND FURTHER THAT this resolution be sent to the Minister of Transportation, the MPP for Kenora-Rainy River and to all Ontario Municipalities."
ABSTAIN CARRIED AYES DEFEATED
AYESDEFEATED
NAYES
L. ARMSTRONG D. EWALD MAYOR OR ACTING MAYOR B. HELGESON N. IVALL M. KREGER
G. PASLOSKI
P. WHITE in the heart of Ontario's Sunset Country

Subject: GRIDS2/MCR May 17th Public Meeting

From: Aimee Carreen Stricker

Sent: Monday, May 16, 2022 12:09 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

I support farmland protection and climate resilient, inclusive urban neighbourhoods for our city! I say NO to urban boundary expansion and NO urban sprawl!

Please consider my heartfelt appeal to protect our farmlands and support of inclusive zoning.

Thank you,

Aimee Huffman

Ward 8 resident

Subject: GRIDS2/MCR May 17th Public Meeting

From: Richard Johnson

Sent: Monday, May 16, 2022 12:19 PM

To: clerk@hamilton.ca

Cc: Rick Johnson <johnsonr22@rogers.com>
Subject: GRIDS2/MCR May 17th Public Meeting

Hello City Officials:

This letter is in reference to the GRIDS2/MCR plan and meant for the May 17 Statutory Meeting. Without a degree of doubt, we fully support the protection of farmland surrounding the city of Hamilton and am absolutely opposed to expanding Hamilton's current city boundaries and in total favour of freezing Hamilton's urban boundary. We must make sure that any future population growth can be climate resilient and that our urban neighbourhoods be included within the current city boundaries. We must save our farmlands for food production and not for building new homes which are unaffordable to those who most need them and only serve to exacerbate the current climate crisis; City officials must follow through on the expressed wishes of Hamiltonians for a firm urban boundary as it exists today! Let's build a Hamilton together that helps us accommodate new families but at the same time is affordable, again climate resilient and supported by surrounding farmlands to feed our citizens. We Hamiltonians know what we need; Doug Ford and the provincial government do not know what we need! Hamilton is for Hamiltonians! Thank you for your kind attention.

Sincerely,

Rick and Lynda Johnson

Subject: GRIDS2/MCR May 17th Public Meeting

From: Colin Marshall

Sent: Monday, May 16, 2022 12:21 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

The boundary must be kept as it is now! We cannot aford to lose any more valuable farmlands in this area or in the rest of Canada we are already importing way to much food and other products from other countries. Once farmland is paved over there is no going back it is gone FOREVER.

Colin Marshall Stoney Creek

Sent from my iPad

Subject: Stop Sprawl HamOnt

From: Marilyn Marchesseau

Sent: Monday, May 16, 2022 12:13 PM

To: clerk@hamilton.ca

Subject: Stop Sprawl HamOnt

This letter is in reference to GRIDS2/MCR meant for the May 17 public meeting.

I support farmland protection and climate resilience and inclusive urban neighbourhoods and the importance of inclusionary zoning. We must be prepared and able to continue to feed our own and future populations in Canada and abroad.

Please include this letter to the many at your meeting tomorrow.

Marilyn Marchesseau

Subject: GRIDS2/MCR May 17th Public Meeting

From: Victoria Koch

Sent: Monday, May 16, 2022 12:27 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

I support farmland protection and climate resilient, inclusive urban neighbourhoods for our city of Hamilton!

I wish to stress the importance of inclusionary zoning.

I do not support destruction od farmland to expand city boundaries.

Victoria Koch Ancaster/Hamilton



PARTNERS:

GLEN SCHNARR, MCIP, RPP

GLEN BROLL, MCIP, RPP

COLIN CHUNG, MCIP, RPP
JIM LEVAC, MCIP, RPP

4.6 (f)

May 16, 2022

GSAI File No. 709-014

City of Hamilton 71 Main Street West Hamilton, ON L8P 4Y5

Attention: Stepanie Paparella, Legislative Coordinator

RE: GRIDS 2 and Municipal Comprehensive Review

City of Hamilton

Dear Chair and Members:

Glen Schnarr & Associates Inc. (GSAI) are the planning consultants for Hamilton Country Properties Ltd. (c/o Country Homes), who own lands within the Elfrida Whitebelt area which are municipally known as 646 Henderson Road (the 'Subject Property').

On behalf of Hamilton Country Properties Ltd and further to our previous correspondences dated January 29, 2021, and May 27, 2021, we are pleased to provide this letter in relation to the ongoing GRIDS 2 and Municipal Comprehensive Review (MCR) process.

GSAI has been participating in the City's ongoing MCR process. We understand that this process will culminate in a comprehensive Official Plan Amendment ('OPA') that will modify policy permissions for lands across the City of Hamilton, including the Subject Property. We understand the City of Hamilton is completing the MCR process to update the Urban and Rural Hamilton Official Plans to conform with Provincial planning documents and to implement City Council's direction for the "No Urban Boundary Expansion" growth scenario.

In our opinion, City Council's decision to maintain a firm urban boundary to the year 2051 does not conform to the MCR policy requirements outlined in A Place to Growth: Growth Plan for the Greater Golden Horseshoe, 2020 (the 'Growth Plan') and is inconsistent with the Province of Ontario's Land Needs Assessment Methodology. Our opinion herein is consistent with the technical opinion provided by City staff and its consultants through the Land Needs Assessment, in that additional urban boundary expansion is required to meet projected population and employment growth to the year 2051.

We support a growth management strategy across the City of Hamilton that conforms with the policies of the Growth Plan and is consistent with the Provincial Land Needs Assessment Methodology. We believe that it is good planning to allocate future growth through intensification in the existing urban area supported

10 Kingsbridge Garden Circle Suite 700 Mississauga, Ontario L5R 3K6 Tel (905) 568-8888 Fax (905) 568-8894

www.gsai.ca



by sufficient community services, infrastructure, and amenities and new growth that achieves compact, walkable, and sustainable communities in the new urban expansion areas. We do not believe the City's "No Urban Boundary Expansion" growth scenario and corresponding OPAs achieve this balance of growth.

We continue to support City staff's recommendation that an urban boundary expansion into the City's existing Community Area Whitebelt lands, including the Elfrida, Twenty Road East, and Twenty Road West lands, are required to accommodate population and employment growth to the year 2051. We maintain the position that Elfrida lands, in its entirety, remain a logical, appropriate, and needed expansion to the City's urban boundary. Through the previous GRIDS 1 and subsequently the Elfrida Secondary Plan process, a Nodes and Corridors land use structure was endorsed. Following GRIDS 1, significant resources were spent to implement the City's growth management strategy, which includes a subwatershed study for the Elfrida lands, and the extension of services. An urban boundary expansion into the City's Community Area Whitebelt lands, including the Elfrida lands, provides a balanced growth strategy to accommodate a market-based approach for housing supply, while prioritizing key growth management objectives such as climate change, complete communities, preserving and enhancing the natural heritage system and effectively planning around existing and planned infrastructure.

Thank you for the opportunity to provide these comments. Our Client wishes to be informed of updates and future meetings. Please feel free to contact the undersigned if there are any questions.

Yours very truly,

GLEN SCHNARR & ASSOCIATES INC.

Colin Chung, MCIP, RPP Managing Partner

cc. Mr. Steve Robichaud, City of Hamilton Mr. Heather Travis, City of Hamilton. Hamilton Country Properties Ltd.

Mr. Patrick Harrington, Arid & Berlis LLP

Subject: Grids2-MCR

From: Lilly Noble

Sent: Monday, May 16, 2022 12:56 PM

To: clerk@hamilton.ca
Subject: Grids2-MCR

RE: GRIDS2/MCR Plan

Dear Planning Committee Members,

Thank you for taking the bold step of preserving prime farmland in Hamilton and planning for a better city. More middle density homes will help with affordable housing and increase transportation options.

Thank you for doing the best for Hamilton residents.

Lilly Noble

Subject: GRIDS2/MCR May 17th Public Meeting

From: Juanita Lepage

Sent: Monday, May 16, 2022 12:59 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

To whom it may concern,

As a resident of Hamilton, I am writing this letter to advocate for continued action by the city to support the protection of farmland and wild spaces. As the pressure mounts from the provincial government to make different choices, please continue to advocate for building choices that minimize their impact on the environment.

If a decision is made to make new homes, please make communities that can be self-sufficient and not more suburban sprawl. Milton is an example of what happens when this is not taken into consideration. It used to be a beautiful place and now it's sprawl. Research has also shown that communities that are designed that are walkable and conducive to connection are better for our focus and our mental health. https://johannhari.com/ - has multiple books and research on this factor.

I also support building within the urban boundary to support the businesses within the city of Hamilton and reenergizing these areas.

Thank you,

Juanita Lepage

Subject: GRIDS2/MCR May 17th Public Meeting

From: Barbara Patterson

Sent: Monday, May 16, 2022 1:30 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

To the Planning Committee,

We would strongly suggest your decision tomorrow reflect what the mayor and council voted for and what the people of Hamilton want and what is best for the future life of all!

We support farmland protection and climate resilient, inclusive urban neighbourhoods for our city!

It is of utmost importance for the zoning to be inclusionary!

With thoughtful consideration of the future of our children not the easy route for developers!

Ken MacDonald

Barbara Patterson

Citizens of the City of Hamilton L9H

Subject: GRIDS2/MCR May 17th Public Meeting

From: Inger Hinz

Sent: Monday, May 16, 2022 2:01 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

To Whom it may concern,

I oppose the urban expansion as our city must look to the future for preserving our food resources.

I believe in new housing within our current boundaries.

Thank you

Inger Hinz

Pilon, Janet 4.6 (k)

Subject: GRIDS2/MCR May 17th Public Meeting support for Farmland protection

From: Mary & Randy Stroh/Muirhead Sent: Monday, May 16, 2022 2:03 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting support for Farmland protection

This letter is in reference to the GRIDS2/MCR plan and is meant for the May 17th Statutory Public Meeting.

We whole heartedly support farmland protection + climate resilient, inclusive urban neighbourhoods for our city! Inclusionary zoning is also important.

There is land available for redevelopment in the core which would support the LRT, affordable housing and develop thriving communities within and save our urban boundaries. We cannot pave over our farmland which is a rich resource.

Mary Stroh and Randy Muirhead

Subject: no to urban boundary expansion

From: Jan Keeton

Sent: Monday, May 16, 2022 2:17 PM

To: clerk@hamilton.ca

Subject: no to urban boundary expansion

To The City Clerk

I wish to add my support for a no urban boundary expansion and no loss of farmland to the Hamilton Planning Committee meeting on May 17/22.

In this time of a rapidly changing climate leading to weather extremes which is exacerbated by urban sprawl coupled with the concern of future food security it is imperative that we do not continue the post WW11 sprawl which has been so much a part of the Canadian housing landscape and has lead us to the crisis situation we are now in. One wonders with this seemingly ignorant assessment of cause and effect what would eventually force people to realize there is no more land available to be paved over.

There have been a number of excellent studies done in Hamilton which show that infilling existing neighbourhoods is both possible and desirable since it utilizes existing land, neighbourhoods, transportation, infrastructure (including schools and hospitals). Indeed it is a win, win. The city and taxpayers save money, neighbourhoods become more vibrant, farmland is protected and the environment is less negatively impacted by population increases.

Jan (Keeton)

Subject: GRIDS2/MCR May 17th Public Meeting

From: Margie

Sent: Monday, May 16, 2022 2:55 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

No urban sprawl. We need our agriculture and our wetlands to be protected.

Stop Ford from lining his pockets and the pockets of developers. We need to elect a government for all of us.

Margie Nash Ancaster

Subject: GRIDS2/MCR May 17th Public Meeting

From: sarah laufman

Sent: Tuesday, May 17, 2022 12:41 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

We should be preserving what we have and not destroying nature for money. Once it's gone it's gone. We should have learned from the pandemic that food supplies need to be in our own backyard. Shortages from delayed shipping, contaminated waters, sick employees were just a few of the reasons. If we have our own supply we can protect our people, economy and supply. Look at the wheat shortage because of Russia as an example. Please think of our future. Our children's futures too.

Sincerely Sarah Laufman

Subject: GRIDS/MCR May 17 public meeting

From: Jennifer Waring

Sent: Monday, May 16, 2022 10:43 AM

To: clerk@hamilton.ca

Cc: VanderBeek, Arlene < Arlene. VanderBeek@hamilton.ca>

Subject: GRIDS/MCR May 17 public meeting

To: The Planning Committee Hamilton.

Re: GRIDS2/MCR plan, meant for the May 17th Statutory Public Meeting.

I am writing to urge you to approve the freezing of Hamilton's urban boundary.

Over the past months, where other municipalities have caved in to provincial pressure, Hamilton (its people as well as its elected officials) has shown that it is willing to take climate change and food insecurity seriously. Change is necessary, in our habits and thinking, and Hamilton is in a position to show the way. We need to create density within existing boundaries and not over-burden taxpayers with the cost of creating new infrastructure; we need to create walkable, liveable urban environments; we need to support local agriculture. We certainly cannot afford to perpetuate practices that have contributed to climate change (suburban sprawls, dependence on cars), and which clearly provide no solution to the problems they create.

The people of Hamilton need you to keep your resolve – in fact, communities everywhere need our example. We are all counting on you.

Thank you for hearing this plea.

Jennifer Waring



4.6 (p)

May 16, 2022 Project: FE.HA

Mayor Eisenberger & Councilors of the Planning Committee

c/o Clerk City of Hamilton Hamilton City Hall 71 Main Street West Hamilton, ON L8P 4Y5

Attention:

Re: Statutory Public Meeting on Draft Official Plan

We are planners to 1507565 Ontario Limited otherwise known as the Frisina Group, who own approximately 106 acres of land located within the Elfrida Community.

Your staff and your highly experienced and respected consultants previously recommended the Ambitious Density Scenario although noting that that scenario will be challenging to achieve. The intensification and greenfield density targets in that scenario were in combination the highest being proposed in the Greater Golden Horseshoe.

Although your staff noted that it will be a challenge to implement the high levels of intensification, the Ambitious Density Scenario provided a balance of intensification and greenfield growth and addressed climate change by creating compact new communities with the highest greenfield density in the Greater Golden Horseshoe.

The Growth Plan sets out an intensification first approach, but the Growth Plan needs to be read as a whole. The Growth Plan, Provincial Policy Statement and the land needs assessment methodology all require that growth to 2051 satisfy market demand as well as to provide intensification. Satisfying market demand requires intensification primarily in the form of apartments in the Built-up Area, but also requires greenfield growth to provide for market-based family housing. The Ambitious Density Scenario provided for much needed ground related housing to satisfy market demand and to address the housing affordability and housing supply crisis for families.

Despite the professional recommendations received, on a very aggressive growth scenario, Council chose a no urban boundary expansion.

As a result of Council's decision, the proposed amendments to the Urban Hamilton Official Plan (UHOP) and Rural Hamilton Official Plan (RHOP) attached as Appendices A and B to Report PED21067(b) contain policy changes to implement the no urban boundary expansion.

The proposed policy changes to the UHOP to implement the no urban boundary expansion include:

- A.2.1 Direction 3 on concentrating new development within existing built-up areas with no reference to need for greenfield growth;
- A.2.3.3.4 with a minimum 80% of residential develop to occur within the built-up area;
- A.2.4 in reference to a No Urban Boundary Expansion and accommodating all growth within the existing Urban Area;
- B.2.1.1 in reference to the existing urban boundary representing all of the City's project urban growth for 30 year;
- B.2.2.1 referring to the City's urban boundary as firm and no expansion being required;
- B.2.2.3 not permitting expansions of 40 hectares or less;
- The deletion of current policies B.2.2.3 and B.2.2.4 requiring a municipal comprehensive review for an urban boundary expansion; and
- Schedule A and the lack of a settlement boundary expansion.

The proposed policy changes to the RHOP to implement the no boundary expansion include:

- B.2.1 in refence to maintaining a firm urban boundary and not adding lands to the Urban Area;
- The deletion of Special Policy Area B; and
- Volume 3: Map A the deletion of the Elfrida Special Policy Area B.

We do not support these changes. Although they seek to increase the supply of housing through apartments, they will not satisfy market demand. Council needs to be cognizant that apartment units on a per square foot basis are more expensive than an equally sized townhouse. Placing a reliance on apartments through the no urban boundary expansion scenario, will result in higher costs for families looking for three-bedroom accommodation.

In our opinion the proposed policy changes do not conform to the Growth Plan and are not consistent with the Provincial Policy Statement and ignore the considerable amount of work undertaken by the City's consultants and Staff on the Land Needs Assessment and Municipal Comprehensive Review. In addition, this policy direction will not help to address the housing crisis for families who seek ground related housing.

The City has spent or allocated hundreds of millions of dollars on infrastructure projects servicing each of the areas being studied for settlement expansion in anticipation of an approved urban boundary expansion. Conversely, the City has not identified the cost

required to upgrade the current infrastructure in order to accommodate the no urban boundary expansion and associated 80% intensification target in the Built-up Area. I am informed that this infrastructure cost within the Built-up Area is estimated to be many hundreds of millions of dollars and will take years to complete. Due to this infrastructure requirement, the no urban boundary expansion will do little to address the lack of affordable housing supply in Hamilton over the next 10 years and will not help to address the housing crisis for families who seek ground related housing. Areas outside the urban boundary, including those where the City has invested hundreds of millions of dollars in public infrastructure could be developed in a shorter period of time and accommodate the need expressed by the market for ground level development.

Yours very truly, **SGL PLANNING & DESIGN INC.**

Paul Lowes, MES, MCIP, RPP

c.c. David Sunday, Gowling WLG
Jonathan Minnes, Gowling WLG
Frisina Group

Subject: GRIDS2/MCR May 17th Public Meeting

From: Heather Zupko, CHRL, RHN Sent: Monday, May 16, 2022 5:09 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

Hello,

If it's not too late, I would like to express my support to maintain the urban boundaries as voted for by the council recently. If we do not protect our farm lands, where will we grow our food? When does the expansion end? Please keep the urban boundaries in place!

Thank you,

--

Heather Zupko, CHRL, RHN

Subject: GRIDS2/MCR May 17th Public Meeting

From: Christine Fitzpatrick

Sent: Monday, May 16, 2022 4:00 PM

To: clerk@hamilton.ca

Subject: GRIDS2/MCR May 17th Public Meeting

Hello

We vehemently support protecting farmland and climate resilient urban neighborhoods...and inclusionary zoning...Please stop the sprawl!

This is meant for tomorrow's meeting.

Thank you

Chris & Gene Fitzpatrick

Subject: Dismay

From: Marijus Gudinskas

Sent: Thursday, May 12, 2022 7:55 AM

To: clerk@hamilton.ca; Office of the Mayor Officeofthe.Mayor@hamilton.ca>

Cc: Nann, Nrinder < Nrinder.Nann@hamilton.ca>; Farr, Jason < Jason.Farr@hamilton.ca>; Ward 1 Office

<ward1@hamilton.ca>

Subject: Dismay

I am somewhat dismayed that no other considerations or steps (please see May 8th email sent by me - recoupied below) were taken prior to taking the drastic measure of passing the motion calling for "conversion of Main Street from one-way to two-way be approved as an immediate safety intervention."

There were multiple other safety measures that could of been considered prior to taking this last step.

No guarantees that going to two way traffic will prevent deaths..

We only have to look to the sad passing of Boris Brott killed by a driver on a two-way throroughfare.

May 8th correspondence

Dear representatives.

Like you you, I have been saddened by the recent number of pedestrian fatalities in the recent months.

I have heard that there are considerations for Main and King being turned into two way thoroughfares.

While such a conversion on Main Street may have some practicality I believe that any considerations for King Street should be a "non starter"

After all we do have plans to have an LRT going down a significant portion of King in the years to come.

Also consideration of the impact such a move on other arteries should definitely be considered..

As for other solutions things to consider......I would like to ask some questions as well as propose some solutions.

- 1) I would be curious to know if the number of accidents on those thoroughfares is disproportionate to the volume of traffic (including trucks) that travels on those routes.
- 2) I would like to know if he multiple, 4-5, lane crossing either form north to south or south to north off either 403 Main Street ramps to access Dundurn Street is a contributing factor at that particular intersection.
- 3) While still looking at the Main / Dundurn area I do believe that the entrance to the mall (Fortino's Plaza) from Main may also be a contributing factor. Possible that drivers who have had to wait for cars to make the turn into the plaza t(hen accelerating to make the turn onto Dundurn.
- 4) Prior to conversion of Main to two way .. It may be better to follow Toronto's example of installing speed camera's along a significant stretch of the road. Same could be done King while waiting for LRT to be built..

SPEEDING is a City wide issue that speed cameras may help in "turning down the volume" city wide.. while allowing HWRP's finest to focus on other issues including the crackdown on modified (loud) cars that continue to make life miserable for residents.

I would also hope that you would take the time to consider some of my suggestions as well as others before taking the much more drastic step of turning Main (possibly King) into two way traffic.

I would appreciate it if you would take the time to respond to my enquiries and suggestions

With all due respect for the hard work that you all do... - Marijus

Marijus Gudinskas



The Corporation of the City of Cambridge Corporate Services Department Clerk's Division The City of Cambridge 50 Dickson Street, P.O. Box 669 Cambridge ON N1R 5W8

Tel: (519) 740-4680 ext. 4585 mantond@cambridge.ca

May 18, 2022

Re: Motion: Councillor Hamilton re: Request to the Region of Waterloo to Consider Free Public Transportation on Election Days

At the Special Council Meeting of May 18, 2022, the Council of the Corporation of the City of Cambridge passed the following Motion:

WHEREAS there has been an overall and consistent decline in voter turnout for municipal, provincial, and federal elections in Canada and in Waterloo Region, despite the act of voting being essential to the proper functioning of the democratic process;

WHEREAS many residents struggle to access transportation to polling stations on election days, due to a lack of transportation available, physical mobility or accessibility issues, and/or socioeconomic status;

WHEREAS any initiative to boost attention and incentives to vote on election days warrants attention and exploration in order to assist the democratic process and increase voter turnout;

THEREFORE, BE IT RESOLVED THAT correspondence be sent to the Region of Waterloo on behalf of Cambridge Council to request free public transportation on election day for the Municipal and School Board Election, as well as for the Provincial, and Federal Election days, so as to generate more attention about elections and polling station locations, and to encourage and make it possible for more residents to vote, that would otherwise be unable to access their polling stations.



Should you have any questions related to the approved resolution, please contact me.

Yours Truly,

Danielle Manton

City Clerk

Cc: (via email)

Hon. Premier Ford

Association of Municipalities of Ontario

Marjan

City of Cambridge Council

Pilon, Janet

Subject: Support for amending bylaw to allow drinking in parks

From: Martin Zarate

Sent: Wednesday, May 18, 2022 10:31 AM

To: clerk@hamilton.ca; Ward 8 Office ward8@hamilton.ca; Ward 8 Office ward8@hamilton.ca;

Ward 1 Office <ward1@hamilton.ca>

Subject: Support for amending bylaw to allow drinking in parks

Councillor Wilson, Councillor Danko, Mr Mayor,

I'm writing to voice my support for opening up Hamilton city parks to drinking, and to thank councillor Danko for opening this subject up for study. I think we should be collectively ashamed that we didn't properly move on this in 2020 when COVID shutdown orders effectively declared that anybody who didn't have access to a private yard was effectively banned from socializing over drinks.

Ontario's puritanical attitude towards drinking only seems normal to people who don't travel enough to see other places where enjoying a drink out in public is normal and fine. It's time to begin relaxing these rules and allowing responsible consumption. The Quebec approach (with a meal, daytime-only) seems perfectly reasonable, for example.

And to those who worry about garbage: picnics also cause garbage. Sports events cause garbage. *Use* causes garbage. Too many people see the city's parks as extensions of their private gardens, meant only to be observed. Parks were meant to be enjoyed, and this program would offer a new way to do so.

Thanks for your time,

Martin Zarate Ward 1 resident



May 18, 2022

Federation of Canadian Municipalities (FCM);

Association of Municipalities of Ontario (AMO);

Sent via email: resolutions @fcm.ca; policy @amo.on.ca

To Whom it may concern:

Please be advised that Brantford City Council at its Special City Council meeting held May 17, 2022 adopted the following:

5.1 Release of all Federal and Provincial Documents Related to the Former Mohawk Institute Residential School

WHEREAS the Truth and Reconciliation Commission Final Report, 2015 confirmed that Residential Schools were part of a coherent policy implemented by the Federal Government to eliminate Indigenous people as distinct Peoples and to assimilate them into Christian society against their will; and

WHEREAS the Deputy Minister of Indian Affairs Duncan Campbell Scott outlined the goals of that policy in 1920, when he told a parliamentary committee that "our object is to continue until there is not a single Indian in Canada that has not been absorbed into the body politic…"; and

WHEREAS the Truth and Reconciliation Commission Final Report, 2015 also confirmed that despite the coercive measures that the government adopted, it failed to achieve its policy goals. Although Indigenous Peoples and cultures have been badly damaged, they continue to exist; and

WHEREAS the former Mohawk Institute Residential School operated from 1831 to 1970 within the boundaries of what is now the City of Brantford; and

WHEREAS Survivors have released statements of missing, murdered, and buried students; and

WHEREAS, to date, the unmarked burials of over 7000 missing Indigenous children have been discovered nation-wide; and

WHEREAS, following the May 2021 announcement by Tk'emlúps te Secwépemc First Nation of locating 215 potential burials of children in unmarked graves at the Kamloops Indian Residential School in British Columbia, the Survivors of the Mohawk Institute,

along with their families and community members called on the Federal and Provincial governments to support a search for the remains of missing children who may have been buried on the Mohawk Institute's grounds and the surrounding area; and

WHEREAS, as of November, 2021, a search, led by the Survivors' Secretariat, of the Mohawk Institute Residential School grounds and over 200 hectares of land associated with the school began; and

WHEREAS Survivors of the Mohawk Institute Residential School are demanding the release of all Federal and Provincial documents related to the former Mohawk Institute Residential School; and

WHEREAS staff of the City of Brantford are currently undertaking a search of City records and archives for any documents, maps, or other relevant information related to the operation of the Mohawk Institute Residential School in order to release this information to the Survivors' Secretariat to aid in the search for truth, justice and healing; and

WHEREAS this Council is committed to working to advance reconciliation and renewed relationships with First Nations; and

WHEREAS the Truth and Reconciliation Commission of Canada issued 94 Calls to Action, thirteen of which are directed at municipal governments;

NOW THEREFORE BE IT RESOLVED:

- A. THAT the Council of The Corporation of the City of Brantford respectfully REQUESTS THE IMMEDIATE RELEASE, to the Survivors' Secretariat, of all documents in the possession of the Government of Canada or the Government of Ontario and the Anglican Church related to the former Mohawk Institute Residential School now located on Six Nations of the Grand River Territory, within the geographic boundaries of the City of Brantford; and
- B. THAT the Clerk BE DIRECTED to send a copy of this resolution to: Prime Minister Justin Trudeau; Premier Doug Ford; Minister of Crown-Indigenous Relations Marc Miller; Minister of Indigenous Services, Patty Hajdu; Minister of Indigenous Affairs, Greg Rickford; Linda Nicholls, Primate of the Anglican Church of Canada; MPP Will Bouma; MP Larry Brock, Mayor David Bailey; Chief Mark Hill; Chief Stacey Laforme; and the Survivors' Secretariat; and
- C. THAT the Clerk BE DIRECTED to send a copy of this resolution to the Federation of Canadian Municipalities (FCM) and the Association of Municipalities Ontario (AMO) for circulation to all municipalities in Ontario with an invitation to adopt a similar resolution, and, specifically, to those located within the Haldimand Tract,

including: Haldimand County; the County of Brant; the City of Cambridge; the City of Kitchener; the City of Waterloo; and the Region of Waterloo.

I trust this information is of assistance.

Yours truly,

Tanya Daniels

City Clerk, tdaniels@brantford.ca

Cc All Ontario Municipalities Survivors' Secretariat

Toronto 2015 Pan and Parapan American Games

Backgrounder on Government Support

COSTS

The estimated total cost to deliver the 2015 Pan and Parapan Am Games as per the Auditor General of Ontario was \$2.5B (source: Special Report, June 2016 - The Office of the Auditor General of Ontario). Calculating the "total cost" of a Games is always challenging as there are different ways to look at what to include / exclude from the calculation. Despite the debate about where to draw the line vis a vis total costs, the 2015 Pan and Parapan American Games were a resounding success. See **Appendix A** for a list of Games related accomplishments (from the Province of Ontario's perspective).

Both Toronto 2015, the Organizing Committee for the Games, and the Province of Ontario took risk-based approaches to the management of the preparations and delivery of the Games and worked closely from the outset to ensure prudent spending, conservative contingency levels, minimized exposure to contingent liabilities and adherence to public sector directives. Both organizations implemented a risk management framework that was actively used to managing budget and strategic risks leading to a "no surprises" Games.

Direct Games Delivery Costs

(as per Toronto 2015 and the Province of Ontario)

Contributing Partner	Total (\$M)	%	Description
Province of Ontario	769	45	Covered mainly operating expenses, including
			\$5M for the Legacy Fund; excluding Athletes'
			Village costs (see note below)
Government of	475	28	\$386M provided for capital projects (56% of
Canada			venue construction costs); \$49M for Federal
			Essential Services (including services from <i>Public</i>
			Safety Canada, Canada Border Services Agency,
			Citizenship and Immigration, CSIS, Fisheries and
			Oceans, RCMP, Health Canada and Public Health
			Canada, Transport Canada, Environment Canada,
			Industry Canada); \$65M for the Legacy Fund
Municipalities	212	12	Capital contributions to their own Pan Am related
			venue projects (44% of total cost)
Universities	67	4	Capital contributions to their own Pan Am related
			venue projects (44% of total cost)
Toronto 2015	195	11	Including \$132M in sponsorship (cash and Value In
(revenue)			Kind) and \$39M in ticket sales
	\$1,717		

Cost Type	Total (\$M)	%			
Capital	666	39	80% of venue projects were managed by		
			Infrastructure Ontario; excludes costs for		
			the Athletes' Village (see note below)		
Operating	955	56	Games delivery expenses including Security		
Legacy	96	5	Endowment to fund ongoing operation of		
			Legacy venues and Legacy programming		
			(fund administered by the Toronto		
			Community Foundation)		
	\$1,717				

Athletes' Village

The Province provided and additional **\$709M** in capital funding for the rehabilitation and redevelopment of the West Donlands part of the Waterfront which acted as the Athletes' Village during the Games. The redevelopment of the West Donlands was a project that was already in the works prior to the Games but some estimates say that its delivery was accelerated by 10 to 15 years by the Games.

Indirect Costs & Additional Contributions from Government Partners

Province of Ontario

The Province worked closely with the Bid team to develop the bid for the 2015 Games by providing funding and seconding resources to BidCo to help ensure the success of the bid. It is estimated that the bid cost \$10M to run and through this mutual investment the Province and Bid team were both motivated to ensure that everything was done to ensure the Games were awarded to Toronto. This also included Ontario providing the **deficit guarantee** for the Games, a requirement of the bidding process, when Toronto would not because of the regional nature of the Games. After being awarded the Games, the Province stood up the Pan and Parapan American Games Secretariat to oversee its involvement; the Auditor General of Ontario (the AG) estimates the Secretariat cost \$41M to operate from 2010 to 2015.

The Province played a key role in leading the Integrated Security Unit, which coordinated security planning and delivery for the Games. It also played a leading role in transportation planning and coordination throughout the Games footprint, coordination and planning of Emergency Management, health care and public health systems to ensure preparedness and negotiating with municipalities to ensure clarity around municipal service deliverables and budgets eligible for recovery. The AG estimates that the Province contributed an additional \$200 to \$300M in support of the Games (beyond its direct contributions) largely attributed to unbudgeted or unplanned transportation, security, municipal services and additional legacy and celebration costs.

See **Appendix B** for a detailed description of provincial ministries and agencies involved in supporting the Games.

The Province also funded three "special" capital projects - providing \$31M for Markham, \$23M Ivor Wynne and \$22.5M for Goldring Centre (U of T). It's unclear how the Province accounted for those projects in the costs presented in the AG's report.

In addition to its stated investments in the Games, the **Vaughan subway extension**, **Pearson UP Express** and **Union Station upgrades** were originally positioned as Pan Am; somewhere along the timeline, they disappeared from the narrative.

Government of Canada

The Government of Canada, through Canadian Heritage, having participated in many international multi sport Games, learned to mitigate its financial risk from the Games by containing its investment largely to building sport infrastructure. Like Ontario, Canada stood up a Pan and Parapan American Games Secretariat to oversee its involvement in the Games. The federal Secretariat had a somewhat hands-off approach to the delivery of the Games, focussing on the specific policy priorities of Sport Canada (e.g. the sport aspect of the Games).

In addition to its stated funding commitments in support of the Games, Canada provided a small amount of additional funding to execute a federal cultural strategy (\$6M) and to support Team Canada preparations (\$3M) around the Games.

Municipalities

Participating Games municipalities signed joinders to the Multi Party Agreement along with Municipal Services Agreements with the Province detailing the municipalities' commitment to supporting the Games. In addition to funding their share of their own capital projects (44%), municipalities provided a commitment to maintaining "normal" levels of service for: EMS, fire, rescue, street cleaning, parks maintenance, parking operations and enforcement, garbage and recycling collection, traffic signal maintenance and operations, graffiti removal, water and sewer maintenance, street lighting and by law enforcement. Municipalities also had a role to play in helping to pave the way for permits (construction, etc.) and special bylaw changes required to stage the games.

The most significant municipal service provided by municipalities to support the Games was in the form of policing. Municipal police services were paid through the overall security budget developed and overseen by the ISU.

For additional detail on the City of Toronto's contribution to the Games please see Appendix C.

Appendix A - Provincial Success Stories from the 2015 Games

- 26,000 new jobs
- \$3.7B boost to GDP
- 250,000 tourists
- Cultural and community programming that amplified the impact of the games and fostered community engagement and inclusion
- Support to local talent including artists and performers
- Promotion of volunteerism
 - Trained an army of volunteers who continue their acts of public service beyond Toronto
 2015
 - Provided opportunities for students to gain valuable skills and leverage the experience of seniors with leadership experience as a key workforce delivery channel
- Critical venue investments and improvements
 - Renovation of existing venues upgrades to aging infrastructure; there had been no significant investment in sport / rec infrastructure since the Centennial 1967
 - New builds bringing much needed infrastructure to underserved communities
 - U of T Scarborough students and the broader community in addition to national centre of excellence and elite training facility
 - Hamilton and Markham provincially allocated top ups for specific projects
 - Milton Velodome critical elite sport training facility and also a multi purpose facility serving a growing community
 - No white elephants; venue plans post games tied into community / institution use as much as possible
- Redevelopment of the West Donlands through the construction of the Athletes' Village
 - Acceleration of the rehabilitation and redevelopment of the West Donlands including a significant investment in flood protection
 - Included affordable housing component from the outset
 - Home to a new YMCA and residence for George Brown College
 - Resulted in the brown field being converted into a much loved, vibrant part of the waterfront; accelerated development adjacent to the West Donlands
- Better regional transportation planning
 - Encouraged regional coordination, cooperation and service provisioning transit agencies across the region working together like never before on solution-oriented issues like HOV lanes and demand management
- Coordinated security planning resulting in no significant security incidents
 - Multiple jurisdictions working together under the direction of the Integrated Security
 Unit run by the OPP
- Preparedness: Health and Emergency Management
 - Planning exercises to prepare for any possible outcome
 - Good practice for pandemic preparedness and response; the work that was done related to Toronto 2015 undoubtedly helped the region in Covid relief efforts and left the Province better able to respond to the crisis
- Delivering a lasting Legacy

- The Legacy Fund supporting ongoing operating costs of key Legacy venues and ensuring community access to programming for years to come
- Over 90,000 hours per annum of community access at the 25 games related facilities
- o 500 Legacy jobs in Pan and Parapan Am venues
- Providing elite swimmers and cyclists the ability to train closer to home, rather than making them travel to the US or other jurisdictions to train
- Apprenticeship and training programs for construction and trades
- Pan and Parapan American Kids program featuring parasport programming and promotion around diversity and inclusion delivered to 4,250 sites and over 50,000 kids across the province
- o 250 km of the Trans Canada trail filled in throughout Ontario
- Improved accessibility for people with disabilities
 - o Barrier free games improved accessibility for all
 - o Training provided to all volunteers and workforce
 - o Audits conducted across the games footprint to improve accessibility beyond the games
 - Created business and trade opportunities including hosting business delegations from LatAm countries and leveraging the Games to deliver global forums / conferences to coincide with the Games

Appendix B - Provincial Support

Ministries with Key Roles

Ministry of Transportation

- Transportation planning led by MTO estimated \$40M cost
- Coordination across the region included setting up HOV lanes, implementing transportation demand management plans to reduce vehicular traffic by 20% to ensure smooth travel of Games vehicles, multi jurisdictional transit authority planning
- Also involved coordinating asks for "free" public transit for workforce, volunteers and spectators

Ministry of Community Safety and Corrections Service

- Key roles for the OPP and Office of the Fire Marshal and Emergency Management
- Estimated cost of **\$182M** to secure the Games (this for an event with the security threat level that was compared to the Toronto Santa Claus Parade)
- Security for the Games was provided jointly by the Ontario Provincial Police/Integrated Security Unit (OPP/ISU), the Royal Canadian Mounted Police (RCMP), eight regional and municipal police forces, TO2015, and private security services contracted by the OPP/ISU and TO2015.
- The OPP held the lead across all the police service organizations and were responsible for incident management, accreditation, security risk assessments and private security.

Ministry of Health and Long-Term Care

- MOHLTC had to coordinate with the hospital network across the Games footprint to make sure that any medical emergencies relating to foreign visitors were handled properly
- Participants had travel medical insurance paid for by TO2015
- MOHLTC ran a roundtable of all health-related partners which took care of preparedness, reporting, resourcing and made sure that appropriate responses were in place for outbreaks and pandemics

Ministry of Municipal Affairs and Housing

- MMAH helped to liaise with municipalities with regard to the Municipal Services Agreements which
 outlined the enhanced and net new services needed to accommodate the visitors and Games
 participants coming to the region for the event
- Incremental service agreements described how municipalities / institution would interface with MMAH, the ISU, MTO, the Ministry of Health and the Office of the Fire Marshal and Emergency Management (for games time planning), etc. and set service standards for any net new service spending or service levels

Ministry of Education

• Ran programming (PPA Kids) to complement the Games objectives

Other:

Ministries with Supporting Roles

Aboriginal Affairs; Agriculture, Food and Rural Affairs; Attorney General; Children and Youth Services; Citizenship, Immigration and International Trade; Economic Development, Employment and Infrastructure; Environment and Climate Change; Finance; Government and Consumer Services (ServiceOntario); Labour; Training, Colleges and Universities; Cabinet Office; Treasury Board Secretariat; Francophone Affairs

Agencies:

Cultural institutions (e.g. ROM, AGO, etc.), delegated authorities (e.g. TSSA), OLGC, LCBO, Metrolinx

Appendix C - City of Toronto Support

The City Manager's Office provided operational support and oversight in the lead up to and during the Games through the Pan Am / Parapan Am Games Unit. Toronto contributed a total of \$96.5M (44% of costs of capital programs) for 11 capital projects related to Games venues. The City estimates they unlocked an additional \$250M in investment from partners through the Games.

The City of Toronto was the municipal partner with the greatest number of Games related venues and activities taking place within its boundaries. To support events happening in the city, Toronto agreed to provide \$4M worth of services at "normal" levels (e.g. emergency medical services, garbage and recycling collection, police, etc.). Additional "incremental" services were provided to support the Games, and these expenses were eligible for reimbursement by Toronto 2015 and the Province. Municipal services to support the Games were provided by: Fire Services; Toronto Paramedic Services; Transportation Services; Parks, Forestry and Recreation; Toronto Public Health; Solid Waste; Municipal Licensing & Standards; Toronto Parking Authority; and the Toronto Transit Commission (TTC). It is estimated that almost \$10M was recoverable from the Province and Toronto 2015 for incremental services. The Toronto Police Service provided support to the Games which cost \$43M and was funded through the ISU.

The City also invested **\$19M** in the Host City Showcase which funded initiatives relating to (non-sport infrastructure) legacy, public celebrations, cultural festivals and promotion activities to enhance the Games experience for local residents.



PUBLIC WORKS COMMITTEE REPORT 22-008

1:30 p.m.
Monday, May 16, 2022
Council Chambers
Hamilton City Hall
71 Main Street West

Present: Councillors N. Nann (Chair), R. Powers (Vice-Chair), J.P. Danko,

L. Ferguson, S. Merulla, E. Pauls, M. Pearson and A. VanderBeek

Absent with C Regrets: C

Councillor J. Farr – Personal Councillor T. Jackson – Personal

Councillor T. Whitehead - Personal

THE PUBLIC WORKS COMMITTEE PRESENTS REPORT 22-007 AND RESPECTFULLY RECOMMENDS:

1. Annual Watermain Break Report – 2021 (PW22031) (City Wide) (Item 7.1)

That Report PW22031, respecting the Annual Watermain Break Report – 2021, be received.

2. Biosolids Management Facility Update (PW11098(i)) (City Wide) (Item 7.2)

That Report PW11098(i), respecting the Biosolids Management Facility Update, be received.

3. 2021 Annual Wastewater Treatment Bypass Report (PW22036) (City Wide) (Item 7.3)

That Report PW22036, respecting the 2021 Annual Wastewater Treatment Bypass Report, be received.

4. Clean & Green Neighbourhood Grant 2022 Funding Recommendations (Keep Hamilton Clean and Green - Citizen Committee Report) (Item 7.4)

That the Keep Hamilton Clean and Green – Citizen Committee Report, respecting Clean & Green Neighbourhood Grant 2022 Funding Recommendations, be received.

5. Housekeeping Update to Parks By-law 01-219 (PW22032/PED22066) (City Wide) (Item 10.1)

- (a) That the amending By-law, being a By-law to amend the City of Hamilton Parks By-law 01-219, attached as Appendix "A" attached to Report PW22032/PED22066, which has been prepared in a form satisfactory to the City Solicitor, be enacted by Council be approved.
- (b) That staff report back with best practices respecting the regulation of alcohol consumption in public parks.
- 6. Funding for the Woodward Wastewater Treatment Plant Primary Digester 3 Emergency Repairs (PW22034) (City Wide) (Item 10.2)

That up to \$5,000,000 from the Wastewater Capital Reserve (108005) be used to fund the emergency works approved under Procurement Policy By-Law No. 21-215, Policy 10 - Emergency Procurements, for the Woodward Wastewater Treatment Plant Primary Digester 3 failure.

7. Appropriation Transfer of Funds for Barton Street East – Parkdale to Talbot – 2022 Construction Project (PW22038) (Ward 4) (Item 10.3)

- (a) That Council approve the award of C15-02-22 (HSW) Barton Street East Parkdale to Talbot Reconstruction, pursuant to Procurement Policy #5.3 Request for Tenders, to Coco Paving Inc., in the amount of \$8,086,000 (not including Contingency and Non-Refundable HST), and that the General Manager, Public Works Department be authorized to negotiate, enter into and execute any required Contract and any ancillary documents required to give effect thereto with Coco Paving Inc., in a form satisfactory to the City Solicitor;
- (b) That the increase of \$883,000, from \$2,270,000 to \$3,153,000, in the budget for Barton Street East Road Reconstruction Parkdale to Talbot project (#4031919110), be funded by an appropriation of previously approved Capital Levy funds from the Bridge 163 Centennial Parkway North, 540m n/o Barton project (#4031118126) as referenced in Appendix "A" attached to Public Works Report 22-008;
- (c) That the budget and financing plan for Barton Street East Watermain Parkdale to Talbot (#5142171310), totaling \$1,200,000 be amended and approved, resulting in an increase of \$582,000, from \$1,200,000 to \$1,782,000 to be funded from the following sources as referenced in Appendix "A" attached to Public Works Report 22-008:

- (i) A capital budget appropriation of previously approved rates revenues of \$360,000 from Parkdale Burlington to north end & Steel City Court project (#5141971310);
- (ii) A capital budget appropriation of previously approved rates revenues of \$107,000 from Parkdale Burlington to north end & Steel City Court project (#5141970010);
- (iii) A capital budget appropriation of previously approved rates revenues of \$115,000 from Charlton 750mm WM Lining project (#5142160073).
- 8. Budget Increase for Dickenson Road Trunk Sewer (Airport Employment Growth District) (PW22040) (Ward 11) (Item 10.5) (REVISED)
 - (a) That Council approve the award of C15-11-22 (HSW) Dickenson Road East Sanitary Sewer and Watermain, pursuant to Procurement Policy #5.3 Request for Tenders, to Technicore Underground Inc. in the amount of \$102,151,957.22 (not including Contingency of \$10,000,000 and Non-Refundable HST of \$1,973,875.48);
 - (b) That the General Manager, Public Works Department be authorized to negotiate, enter into and execute any required Contract and any ancillary documents required to give effect thereto with Technicore Underground Inc., in a form satisfactory to the City Solicitor;
 - (c) That Council approve the single source procurement, pursuant to Procurement Policy #11 Non-competitive Procurements, for additional construction administration services;
 - (d) That the General Manager, Public Works Department be authorized to negotiate and amend the existing Contract and any ancillary documents required to give effect thereto with IBI Group, in a form satisfactory to the City Solicitor;
 - (e) That the amended budget and financing plan for the Dickenson Road Trunk Sewer in the Airport Employment Growth District (#5161696452) be approved, resulting in an increase of \$34,680,000, from \$71,800,000 to \$106,480,000 in total budget approved to date, to be funded by *Rate* Supported Development Charges debt;
 - (f) That the General Manager, Finance and Corporate Services, be authorized to negotiate and confirm the terms, placement and issuance of all debenture issue(s), and / or private placement debenture issue(s), in

either a public or private market and / or bank loan agreements and debenture issue(s) and / or variable interest rate bank loan agreements and debenture issue(s), in an amount not to exceed \$106,480,000 Canadian currency in Tax Supported Development Charges municipal debt for the Dickenson Road Trunk Sewer project;

- (g) That the General Manager, Finance and Corporate Services, be authorized to engage the services of all required professionals to secure the terms and issuance of the debenture issue(s) described in Recommendation (c) including, but not limited to, external legal counsel, fiscal agents and Infrastructure Ontario's Loan Program and the cost of such services be funded from one of the following sources as deemed appropriate by the General Manager of the Finance and Corporate Services: Development Charge Reserves, Non-Obligatory Reserves, and other approved funding sources;
- (h) That the General Manager, Finance and Corporate Services, is authorized and directed to enter into and administer, on behalf of the City of Hamilton, all agreements and necessary ancillary documents to implement Recommendation (c) and in order to secure the terms and issuance of the debenture issue(s) described in Recommendation (c), on terms and conditions satisfactory to the General Manager, Finance and Corporate Services and in a form satisfactory to the City Solicitor.
- 9. Keep Hamilton Clean & Green Committee Terms of Reference (Keep Hamilton Clean and Green Citizen Committee Report) (Item 10.6)

That the Keep Hamilton Clean & Green Committee Terms of Reference, attached as Appendix "A", be approved.

10. Replacement of the Play Structure at Armstrong Park, 460 Concession Street, Hamilton (Ward 7) (Added Item 11.1)

WHEREAS, the Hamilton-Wentworth District School Board has provided space on their property at 460 Concession Street, Hamilton for an existing play structure that is available for public use;

WHEREAS, in December 2021 Council approved \$125,000 funded from the Ward 7 Special Capital Re-Investment Reserve Fund (#108057) for a new play structure and safety surfacing;

WHEREAS, community engagement for the play structure replacement resulted in remarkable levels of community feedback for the project;

WHEREAS, an enhanced design that offers additional play features and

increased play value, which will allow community members more choices for play components, can be installed; and

WHEREAS, an increased budget is required for the enhanced design.

THEREFORE, BE IT RESOLVED:

- (a) That additional funds for the replacement of the play structure at Armstrong Park located on Hamilton-Wentworth District School Board property at 460 Concession Street, Hamilton, be funded from the Ward 7 Special Capital Re-Investment Reserve Fund (#108057) at an upset limit, including contingency, not to exceed \$50,000 and added to Project ID #4242109704 460 Concession Playground.
- (b) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

11. Budget Increase – Reconstruction of Southcote Road - Garner Road to Highway 403 Bridge (Ward 12) (Added Item 11.2)

WHEREAS, revised estimates indicate a shortfall of approximately \$1,400,000 in the reconstruction of Southcote Road due to higher prices on materials, land acquisition street lighting, traffic signals, excess soils and additional pedestrian facilities (PXOs & Sidewalks); and

WHEREAS, revised estimates indicate a shortfall of approximately \$1,400,000 in the storm sewer project due to scope change, higher prices on materials, excess soils, quality control measures required by the Hamilton Conservation Authority (Jellyfish filters – enhanced oil grid separates).

THEREFORE, BE IT RESOLVED:

- (a) That the estimated increased costs for the reconstruction of Southcote Road: Garner Road to Highway 403 Bridge (Project ID 4032011028) be funded by the following transfers:
 - (i) \$400,000 from current contribution in project ID 4032110006 (Minor Maintenance);
 - (ii) \$160,000 from current contribution project ID 4031711016 (Asset Preservation 2017);
 - (iii) \$420,000 from Roads Reserve #11306 (Residential Development Charges); and

- (iv) \$420,000 from Roads Reserve #11307 (Non-Residential Development Charges).
- (b) That the estimated increased storm sewer costs for the reconstruction of Southcote Road: Garner Road to Highway 403 (Project ID 5182271328) be funded by a transfer of \$1,400,000 from the Storm Sewer Capital Reserve #108010.

12. Increase in Capital Project Expenses (Added Item 11.3)

That staff be directed to report back on any and all approved Capital Projects that will require additional funding related to the economy and correlated supply and demand issues that have created the current economic crisis.

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

12. NOTICES OF MOTION

- 12.1 Replacement of the Play Structure at Armstrong Park, 460 Concession Street, Hamilton (Ward 7)
- 12.2 Budget Increase Reconstruction of Southcote Road Garner Road to Highway 403 Bridge (Ward 12)

The agenda for the May 16, 2022 Public Works Committee meeting were approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

Councillor J.P. Danko declared a non-disqualifying interest respecting Added Item 11.1 and Item 12.1 - Replacement of the Play Structure at Armstrong Park, 460 Concession Street, Hamilton (Ward 7), as his wife is Chair of the Hamilton-Wentworth District School Board.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)

(i) May 2, 2022 (Item 4.1)

The Minutes of the April 22, 2022 meeting of the Public Works Committee were approved, as presented.

(d) COMMUNICATIONS (Item 5)

- (i) Correspondence respecting the Dewitt Road Capital Project Road Design (Item 5.1)
 - (i) Lakewood Beach Community Council (Item 5.1(a))
 - (ii) Cam Galindo, Trustee, Wards 9 & 10, Hamilton-Wentworth District School Board (Item 5.1(b))

The following correspondence items respecting the Dewitt Road Capital Project Road Design, were received:

- (i) Lakewood Beach Community Council (Item 5.1(a))
- (ii) Cam Galindo, Trustee, Wards 9 & 10, Hamilton-Wentworth District School Board (Item 5.1(b))

(e) DISCUSSION ITEMS (Item 10)

(i) Housekeeping Update to Parks By-law 01-219 (PW22032/PED22066) (City Wide) (Item 10.1)

That the amending By-law, being a By-law to amend the City of Hamilton Parks By-law 01-219, attached as Appendix "A" attached to Report PW22032/PED22066, which has been prepared in a form satisfactory to the City Solicitor, be enacted by Council be approved.

Report PW22032/PED22066, respecting Housekeeping Update to Parks By-law 01-219, was **amended** by adding recommendation (b), to read as follows:

(b) That staff report back with best practices respecting the regulation of alcohol consumption in public parks.

For disposition of this matter, refer to Item 5.

(ii) Impact of On-Site and Excess Soils Management Regulation (O. Reg 406/19) and other pressures on Capital Program Costs (PW22039) (City Wide) (Item 10.4)

That a budget adjustment of \$8,000,000 be approved to increase the Contaminated Soil & Rock Removal project (#4032114405), from \$2,692,000 to \$10,692,000, and that the increase be funded by a transfer

from the Federal Gas Tax Reserve / Canada Community-Building Fund (No. 112213).

Report PW22039 respecting the Impact of On-Site and Excess Soils Management Regulation (O. Reg 406/19) and other pressures on Capital Program Costs was referred to staff for a report back with further information about the recommendation to increase the funds in the Contaminated Soil & Rock Removal project (#4032114405) account, not related to a specific project, to fund the removal of on-site and excess soils and to provide an explanation of why project tenders did not specify that contractors absorb any additional costs related to the removal of on-site and excess soils.

(f) NOTICES OF MOTION (Item 12)

(i) Replacement of the Play Structure at Armstrong Park, 460 Concession Street, Hamilton (Ward 7) (Item 12.1)

The Rules of Order were waived to allow for the introduction of a Motion respecting Replacement of the Play Structure at Armstrong Park, 460 Concession Street, Hamilton (Ward 7).

For disposition of this matter, refer to Item 10.

(ii) Budget Increase – Reconstruction of Southcote Road - Garner Road to Highway 403 Bridge (Ward 12) (Item 12.2)

The Rules of Order were waived to allow for the introduction of a Motion respecting Budget Increase – Reconstruction of Southcote Road - Garner Road to Highway 403 Bridge (Ward 12).

For disposition of this matter, refer to Item 11.

(iii) Increase in Capital Project Expenses (Added Item 12.3)

The Rules of Order were waived to allow for the introduction of a Motion respecting the Increase in Capital Project Expenses.

For disposition of this matter, refer to Item 12.

(g) GENERAL INFORMATION / OTHER BUSINESS (Item 13)

(i) Amendments to the Outstanding Business List (Item 13.1)

The following amendments to the Public Works Committee's Outstanding Business List, were approved.

(a) Items Requiring a New Due Date (Item 13.1 (a)):

13.1(a)(a) Improving Truck Route Detouring during Construction

Closures

Item on OBL: ABY

Current Due Date: May 16, 2022

Proposed New Due Date: September 19, 2022

13.1(a)(b) Protected Bike Lane Curbs (Hamilton Cycling

Committee - Citizen Committee Report)

Item on OBL: ACA

Current Due Date: Q4 2022

Proposed New Due Date: September 19, 2022

13.1(a)(c) Public Information Portal to Track Environmental

Issues on City of Hamilton Projects

Item on OBL: ACD

Current Due Date: May 30, 2022

Proposed New Due Date: June 13, 2022

(h) ADJOURNMENT (Item 15)

There being no further business, the meeting adjourned at 3:06 p.m.

Respectfully submitted,

Councillor N. Nann, Chair, Public Works Committee

Carrie McIntosh Legislative Coordinator Office of the City Clerk

APPROPRIATION ADJUSTMENT SCHEDULE - Barton - Parkdale to Talbot

	-	GROSS COST		REVENUE		NE NE	T FINANCING REQ	UIRED	
Project Number	Project Description	Budget	Increase/ (Decrease)	Revised	Budget	Increase/ (Decrease)	Revised Budget	Increase/ (Decrease)	REASON FOR Revised ADJUSTMENT
4031919110	Barton - Parkdale to Talbot - road reconstruction	2,270,000	883,000 883,000	3,153,000	2,170,000 FGT	0	100,0	883,000 883,000	3,153,000 Increase required in order to award contract C15-02-22
4031118126	Bridge 163 - Centennial Parkway North, 540m n/o Barton	14,630,000	-883,000 -883,000	13,747,000	9,515,000 FGT 1,000,000 Debenture 470,000 Reserve	0 0 0 0	3,645,0	-883,000 -883,000	Contract C15-46-13 is complete pending final billing from CN. Surplus due to favourable tender and unused 13,747,000 contingency.
5142171310	Barton - Parkdale to Talbot - watermain replacement	1,200,000	582,000 582,000	1,782,000		0	1,200,0	582,000 582,000	1,782,000 Increase required in order to award contract C15-02-22
5141971310	Parkdale - Burlington to north end & Steel City Court - watermain replacement	1,422,000	-360,000 -360,000	1,062,000		0	1,422,0	-360,000 -360,000	• •
5141970010	Parkdale - Burlington to north end & Steel City Court - cost share of road restoration	1,050,000	-107,000 -107,000	943,000		0	1,050,0	-1 07,000	C15-13-18 complete - surplus due to favourable tender and 943,000 unused contingency

KEEP HAMILTON GREEN AND CLEAN COMMITTEE TERMS OF REFERENCE

1 Introduction

1.1 Committee Name

Keep Hamilton Clean and Green (KHCG) Committee (Formerly the Clean City Liaison Committee – Amended October 9, 2013 Item 11 PW Committee Report 13-012)

1.2 Statement of Purpose

The KHCG Committee promotes environmental sustainability and stewardship by engaging individuals to take greater responsibility for protecting and revitalizing the natural and built environment and providing education, assistance and promotion.

1.3 Committee Mandate

The KHCG Committee will support and provide advice to City staff, elected officials and other stakeholders to implement the Clean & Green Hamilton Strategy and Our Future Hamilton community vision. Reporting through the Public Works Committee, the KHCG Committee will provide input to staff and Council on issues relating to environmental sustainability and stewardship and advice on approaches to engaging citizens to take greater responsibility to protect and revitalize natural and built environments. The KHCG Committee's primary focus is on effecting behaviours and attitudes conducive to a clean, healthy and safe community through leadership and action.

The Committee will provide input and guidance to City staff, Council and other stakeholders on community and private sector involvement and identification of resources to sustain Clean and Green programs and initiatives that aim to beautify our community, promote environmental stewardship and prevent litter, illegal dumping and graffiti.

1.4 Accountability

The KHCG Committee is a Volunteer Advisory Committee that advises Council through the Public Works Committee. The KHCG Committee must comply with the City of Hamilton's Procedural By-law, the Advisory Committee Procedural Handbook and operational policies and procedures.

2 Roles and Responsibilities

The role of the KHCG Committee is to encourage Hamilton residents, property owners and visitors to engage in neighbourhood/community initiatives that aim to beautify our community, promote environmental stewardship and prevent litter, illegal dumping and graffiti.

This Committee will assist in connecting community volunteers with litter, illegal dumping, graffiti, beautification and environmental stewardship programs as well as promoting desired behaviours in the community that support the Clean & Green Hamilton Strategy and Our Future Hamilton community vision.

The roles and responsibilities of the KHCG Committee include, but are not limited to, the following:

- (a) Provide input and advice to Council, through reports to the Public Works Committee, and City staff on engaging citizens, property owners and visitors in litter, illegal dumping, graffiti, beautification and environmental stewardship programs;
- (b) Demonstrate leadership in action through participation in events and activities;
- (c) Assist with outreach and education opportunities related to litter, illegal dumping, graffiti, beautification and environmental stewardship programs;
- (d) Support City staff with the development of the annual Clean & Green Hamilton Strategy update for City Council;
- (e) Review reports, studies and other documents on litter, illegal dumping, graffiti, beautification and environmental stewardship issues that may be presented to the KHCG Committee by City staff, consultants, community organizations or the public, and to provide input and recommendations regarding these issues;
- (f) Form working groups to deal with specific issues as they arise;
- (g) Assist in identifying and facilitating resolution of community concerns regarding litter, illegal dumping, graffiti, beautification and environmental stewardship; and,
- (h) Attend and actively participate in KHCG Committee meetings, activities and events.

3 Membership

KHCG Committee membership will reflect a broad range of socio-economic and environmental interests in the community, including residents, businesses, education and local organizations.

3.1 General

- (a) Members must declare any conflict of interest issues prior to discussion or decision-making of any matter with which they believe they have a pecuniary interest; and,
- (b) Members are asked to review all documents, agendas and minutes presented to them to make informed decisions.

Some activities of the KHCG Committee may require additional time commitments dependent upon the nature of the project undertaken.

3.2 Composition

The KHCG Committee shall be comprised of up to 15 voting members and up to six key stakeholders/advisors (non-voting) as follows:

Voting Members:

- Citizen members (up to seven) who will be recruited to represent various backgrounds, ethnicities, genders, geographic areas, ages, etc. within the community;
- Council representative(s) (up to two);
- Youth Representative(s) (up to two one student from each of the Hamilton-Wentworth District School Board and the Hamilton-Wentworth Catholic District School Board);
- BIA representative (one);
- Chamber of Commerce representative (one); and

Key Stakeholders/Advisors (Non-voting Members):

- Environmental sector representative(s) to voice broader concerns from the local environmental sector/organizations, offer technical advice and expertise and connect the KHCG Committee's work to local initiatives when feasible (up to three representatives who are employees or board members with an environmental organization that is based in or carries out a significant amount of programming in Hamilton).
- Industrial, Commercial, and Institutional (IC&I) sector representatives to voice broader concerns from the relevant sector, provide insight and enhance the KHCG Committee's understanding of the sector, and provide opportunities to collaborate with IC&I stakeholders (up to three representatives who are employed with an IC&I organization or facilities based in Hamilton).
- Education Representatives (up to two one from each of the Hamilton-Wentworth District School Board and the Hamilton-Wentworth Catholic District School Board).

Quorum shall be half of the voting membership rounded up to the nearest whole number. Non-voting members are not counted in determining the number required for quorum or in determining whether or not quorum is present.

KHCG Committee and/or working group membership may be expanded to include further community representation as deemed appropriate, upon approval of Council.

City staff liaison(s) from the Environmental Services Division will be made available to the KHCG Committee as a resource. The Committee may request information or support from other City Divisions and Departments or experts in the field to assist in formulating appropriate decisions and recommendations.

3.3 Attendance and Vacancies

Members of Committee who miss more than three meetings during their term without Committee approval, may be subject to replacement on the Committee and may not be eligible for re-appointment.

Citizen members will be appointed in accordance with the City of Hamilton's Policy respecting the Appointment of Citizens to the City's Agencies, Boards, Commissions, Advisory (Volunteer) Committees and Sub-Committees.

Youth Representatives will be recruited by the Education Representative from each respective School Board.

3.4 Term of Membership

The term of membership for KHCG Committee members coincides with the current term of Council or until such time as successors are appointed by Council.

The term of membership for Youth Representatives may be 1-2 years (coinciding with the regular school term) based on their schedule and availability as a student.



PLANNING COMMITTEE REPORT 22-008

May 17, 2022 9:30 a.m. Council Chambers, Hamilton City Hall 71 Main Street West

Present: Councillor B. Johnson (Chair)

Councillor L. Ferguson (1st Vice Chair), Councillors M. Wilson (2nd Vice Chair), J.P. Danko, J. Partridge and M. Pearson

Absent with Regrets: J. Farr - Personal

THE PLANNING COMMITTEE PRESENTS REPORT 22-008 AND RESPECTFULLY RECOMMENDS:

1. Active Official Plan Amendment, Zoning By-law Amendment and Plan of Subdivision Applications (PED22106) (City Wide) (Item 7.1)

That Report PED22106 respecting Active Official Plan Amendment, Zoning By-law Amendment and Plan of Subdivision Applications, be received.

2. Appeal of Zoning By-law Amendment Application ZAC-18-049 and Draft Plan of Subdivision Application 25T-202109 for Lands Located at 860 and 884 Barton Street (Stoney Creek) (PED22114) (Ward 10) (Item 7.2)

That Report PED22114 respecting Appeal of Zoning By-law Amendment Application ZAC-18-049 and Draft Plan of Subdivision Application 25T-202109 for Lands Located at 860 and 884 Barton Street (Stoney Creek), be received.

- 3. Hamilton Municipal Heritage Report 22-005 (Added Item 7.3)
 - (a) Recommendation to Designate 56 York Boulevard, Hamilton (Coppley / Commercial Block) Under Part IV of the Ontario Heritage Act (PED22108) (Ward 2) (Item 8.1)
 - (i) That City Council withdraw the 1979 Notice of Intention to Designate under Part IV, Section 29 of the Ontario Heritage Act, for

- the property at 56 York Boulevard, Hamilton (Coppley / Commercial Block);
- (ii) That City Council state its intention to designate under Part IV, Section 29 of the Ontario Heritage Act, the property at 56 York Boulevard, Hamilton (Coppley / Commercial Block) in accordance with the Statement of Cultural Heritage Value or Interest and Description of Heritage Attributes of 56 York Boulevard, Hamilton, attached as Appendix "B" to Report PED22108;
- (iii) That the Clerk be directed to give notice of intention to designate the property at 56 York Boulevard, Hamilton as a property of cultural heritage value or interest in accordance with the requirements of section 29 of the Ontario Heritage Act subject to the following:
 - (1) If there are no objections to the designation in accordance with the Ontario Heritage Act, City Council directs staff to introduce the necessary by-law to designate 56 York Boulevard, Hamilton to be of cultural heritage value or interest to City Council;
 - (2) If there are objections in accordance with the Ontario
 Heritage Act, City Council directs staff to report back to
 Council to allow Council to consider the objection and make
 a decision on whether or not to withdraw the notice of
 intention to designate the property.
- (b) Heritage Permit Application HP2022-007, Under Part V of the Ontario Heritage Act, to Permit the Demolition of the Existing Dwelling and Garage, 940 Beach Boulevard, Hamilton (Ward 5) (PED22124) (Item 10.1)
 - (i) That Heritage Permit Application HP2022-007, for the demolition of the Part V designated existing dwelling and detached garage for lands located at 940 Beach Boulevard, under Section 42 of the Ontario Heritage Act, be approved with the following conditions:
 - (1) Implementation of the demolition of the dwelling and detached garage, in accordance with this approval, shall be completed no later than April 30, 2024. If the alterations are not completed by April 30, 2024, then this approval expires as of that date and no alterations shall be undertaken without a new approval issued by the City of Hamilton;

- (ii) That appropriate notice of the Council decision be served on the owner of 940 Beach Boulevard, Hamilton, and the Ontario Heritage Trust, as required under Section 42 of the Ontario Heritage Act.
- 4. Municipal Comprehensive Review / Official Plan Review Phase 1
 Amendments to the Urban Hamilton Official Plan and Rural Hamilton
 Official Plan (PED21067(b)) (City Wide) (Item 9.2)
 - (a) That the draft Urban Hamilton Official Plan Amendment, attached as Appendix "A" to Report PED21067(b), which updates the Official Plan to conform with Provincial planning policies and which implements the direction given by the General Issues Committee Decision on November 19, 2021 for a No Urban Boundary Expansion growth option, as part of the City's Growth Related Integrated Development Strategy 2, be APPROVED, and submitted to the Minister of Municipal Affairs and Housing for approval, in accordance with the requirements of the *Planning Act* on the following basis:
 - (i) That the draft Official Plan Amendment, attached as Appendix "A" to Report PED21067(b), which has been prepared in a form satisfactory to the City Solicitor, be enacted by Council;
 - (b) That the draft Rural Hamilton Official Plan Amendment, attached as Appendix "B" to Report PED21067(b), which updates the Official Plan to conform with Provincial planning policies and which implements the direction given by the General Issues Committee Decision on November 19, 2021 for a No Urban Boundary Expansion growth option, as part of the City's Growth Related Integrated Strategy 2, be APPROVED, and submitted to the Minister of Municipal Affairs and Housing for approval, in accordance with the requirements of the *Planning Act* on the following basis:
 - (i) That the draft Official Plan Amendment, attached as Appendix "B" to Report PED21067(b), which has been prepared in a form satisfactory to the City Solicitor, be enacted by Council;
 - (c) That upon adoption of the draft Urban Hamilton Official Plan Amendment and Rural Hamilton Official Plan Amendment, attached as Appendices "A" and "B" respectively to Report PED21067(b), Planning staff be directed and authorized to prepare the implementing Zoning By-law Amendments to the Zoning By-laws of the former Communities of Ancaster, Dundas, Flamborough, Glanbrook, former City of Hamilton, and Stoney Creek and schedule a statutory public meeting of the Planning Committee to consider the proposed changes to the Zoning By-laws of the former Communities.

- (d) That in order to advance the City's work to implement an Inclusionary Zoning Framework within the City of Hamilton, staff be directed to incorporate into the Municipal Comprehensive Review Phase One Official Plan Amendment, a schedule identifying the conceptual locations of the City's Major Transit Stations Areas (MTSAs) and a policy indicating the City's intent to implement an Inclusionary Zoning Framework with respect to those MTSAs (Major GO Stations and LRT stops).
- (e) That the public submissions regarding this matter were received and considered by the Committee in approving the application.

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

The Committee Clerk advised of the following changes to the agenda:

- 1. DELEGATION REQUESTS (Item 6)
 - 6.1 Peter De Iulio respecting 940-946 Beach Blvd. (Recommendation #2 in Item 7.3) (For today's meeting)
- 2. CONSENT ITEMS (Item 7)
 - 7.3 Hamilton Municipal Heritage Committee Report 22-005
- 3. PUBLIC HEARINGS/DELEGATIONS (Item 9)
 - 9.1 Modifications and Updates to existing Secondary Dwelling Unit and Secondary Dwelling Unit Detached Regulations (PED20093(c)) (City Wide)
 - (a) Added Written Submissions:
 - (i) Ronald McCrory
 - (ii) West End Home Builders' Association
 - 9.2 Municipal Comprehensive Review / Official Plan Review Phase 1 Amendments to the Urban Hamilton Official Plan and Rural Hamilton Official Plan (PED21067(b)) (City Wide)
 - (a) Added Written Submissions:
 - (ix) D. Christopher Ashwin
 - (x) Patrick and Deborah Doran
 - (xi) Denise O'Connor
 - (xii) Marie Nutter

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- (xiii) Alysha Read
- (xiv) Cathie Botelho
- (xv) MaryAnn Hudecki Thompson
- (xvi) Isadora Van Riemsdjik
- (xvii) Bill and Gail Lorimer
- (xviii) Rachelle Sender
- (xix) Ingrid Hengemuhle
- (xx) Teresa Gerenscer
- (xxi) Kelly Holt
- (xxii) John Boddy
- (xxiii) Elaine De Ruiter
- (xxiv) Renee Perazzo
- (xxv) Ed and Edda engel
- (xxvi) Jason Hindle
- (xxvii) Ron and Mary Sealey
- (xxviii) Reuven Dukas
- (xxix) Monica Palkowski
- (xxx) Lyn and Rick Folkes
- (xxxi) DD Crowley
- (xxxii) Don Edwards
- (xxxiii) Brenda Alcock
- (xxxiv) Rick and Linda Jones
- (xxxv) Harriet Woodside
- (xxxvi) Kevin Speers
- (xxxvii) Erin Schacklette
- (xxxviii) Erin Mallon
- (xxxix) Alex Berze
- (xl) Leah Avery
- (xli) Don Ryter
- (xlii) Cynthia Meyer
- (xliii) Eric Canton
- (xliv) Sandy Leyland
- (xlv) Illyria Volcansek
- (xlvi) Ed Fothergill
- (xlvii) Nathalie Belu
- (xlviii) Jaleen Grove
- (xlix) Margo May Taylor
- (I) Deb Peace
- (li) Ibro Kuranovich and Damir Sebesta
- (lii) Wyn Andress
- (liii) Jill Tonini
- (liv) Kris Gadjanski
- (lv) Doug Rich
- (Ivi) Patty Haardeng
- (Ivii) Lori Cefaloni
- (Iviii) Margot Olivieri
- (lix) Rob Stovel

- (lx) Lynn MacLennan
- (lxi) Rose Janson
- (Ixii) Nancy Hurst
- (Ixiii) Karen Pingree
- (Ixiv) Melynda Paterson
- (Ixv) Simon Woodside
- (Ixvi) Zoe Green
- (Ixvii) Gord and Angie McNuity
- (Ixviii) Laura Katz
- (Ixix) Conner Harris
- (lxx) Craig Burley
- (Ixxi) Ian Cooke
- (Ixxii) Warren Caldwell
- (Ixxiii) Graham Roebuck
- (Ixxiv) William Hill
- (lxxv) Jan Jansen
- (Ixxvi) John McBrien
- (Ixxvii) Henry Muggah and Elizabeth Crookshank/Muggah
- (Ixxviii) Emily Kam
- (Ixxix) Michelle Webb
- (lxxx) Marion Redman
- (Ixxxi) Doris Khes
- (Ixxxii) Kay Chornook
- (Ixxxiii) Lauren Tindall
- (Ixxxiv) Patricia Baker
- (Ixxxv) Mark Forler
- (Ixxxvi) Nonni Iler
- (Ixxxvii) Debbie Edwards and Rick Csiernik
- (Ixxxviii) Lynn Prince
- (Ixxxix) Steven Romphf
- (xc) Laurie Nielsen
- (xci) Adan Amer
- (xcii) Chong Long
- (xciii) Corbett Land Strategies
- (xciv) Allyn Walsh
- (xcv) Nicole Smith
- (xcvi) Laura Cox
- (xcvii) The Cadillac Fairview Corporation Limited
- (xcviii) Sidana Holdings and 2474314 Ontario Inc.
- (xcix) Michelle Tom
- (c) Ken Stone
- (ci) Marie Covert
- (cii) Joe Minor
- (ciii) Hammer GP LP and Hammer GP Services Corp.
- (civ) Liz Koblyk
- (cv) Isabel Belanger
- (cvi) Frances Murray

- (cvii) Kathryn Cowan
- (cviii) Duncan Appleford
- (cix) Susan Wortman
- (cx) Donna Spurr
- (cxi) Spencer Steenburgh
- (cxii) Andrea Abeysakara
- (b) Added Registered Delegations:
 - (ii) John Corbett, Corbett Land Strategies
 - (iii) Nick Wood, Corbett Land Strategies
 - (iv) Lynda Lukasik, Environment Hamilton
 - (v) Craig Burley

The agenda for the May 17, 2022 Planning Committee meeting was approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

Councillor Wilson declared a disqualifying interest respecting Recommendation #1 in Hamilton Municipal Heritage Committee Report 22-005 (Added Item 7.3), as her spouse is employed by an organization with an interest in the property.

- (c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)
 - (i) May 3, 2022 (Item 4.1)

The Minutes of the May 3, 2022 meeting were approved, as presented.

- (d) DELEGATION REQUESTS (Item 6)
 - (i) Peter De Iulio respecting 940-946 Beach Blvd (Recommendation #2 in Item 7.3) (For today's meeting) (Added Item 6.1)

The Delegation Request from Peter De Iulio respecting 940-946 Beach Blvd (Recommendation #2 in Item 7.3), was approved for today's meeting, to be heard before Item 7.3.

- (e) CONSENT ITEMS (Item 7)
 - (i) Appeal of Zoning By-law Amendment Application ZAC-18-049 and Draft Plan of Subdivision Application 25T-202109 for Lands Located at 860 and 884 Barton Street (Stoney Creek) (PED22114) (Ward 10) (Item 7.2)

Tim Vrooman, Senior Planner, addressed the Committee with the aid of a PowerPoint presentation.

The staff presentation was received.

For disposition of this matter, refer to Item 2.

(f) PUBLIC HEARINGS / DELEGATIONS (Item 9)

(i) Peter De Iulio respecting 940-946 Beach Blvd (Recommendation #2 in Item 7.3) (Added Item 9.3)

Peter De Iulio addressed the Committee respecting 940-946 Beach Blvd (Recommendation #2 in Item 7.3).

The Delegation from Peter De Iulio respecting 940-946 Beach Blvd (Recommendation #2 in Item 7.3), was received.

For disposition of this matter, refer to Item 3(b).

In accordance with the *Planning Act*, Chair Johnson advised those viewing the virtual meeting that the public had been advised of how to pre-register to be a virtual delegate at the Public Meetings on today's agenda.

In accordance with the provisions of the *Planning Act*, Chair Johnson advised that if a person or public body does not make oral submissions at a public meeting or make written submissions to the Council of the City of Hamilton before Council makes a decision regarding the Development applications before the Committee today, the person or public body is not entitled to appeal the decision of the Council of the City of Hamilton to the Ontario Land Tribunal, and the person or public body may not be added as a party to the hearing of an appeal before the Ontario Land Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

(ii) Modifications and Updates to existing Secondary Dwelling Unit and Secondary Dwelling Unit – Detached Regulations (PED20093(c)) (City Wide) (Item 9.1)

Report PED20093(c) respecting Modifications and Updates to existing Secondary Dwelling Unit and Secondary Dwelling Unit – Detached Regulations, was DEFERRED to the May 31, 2022 Planning Committee meeting.

(iii) Municipal Comprehensive Review / Official Plan Review – Phase 1 Amendments to the Urban Hamilton Official Plan and Rural Hamilton Official Plan (PED21067(b)) (City Wide) (Item 9.2)

Alana Fulford, Senior Planner, and Delia McPhail, Policy Planner 1, addressed the Committee with the aid of a PowerPoint presentation

The staff presentation was received.

The following written submissions (Item 9.2(a)) were received:

- (i) Greenhorizons Holdings Inc. / Group of Farms Ltd.
- (ii) Artstone Holdings Ltd.
- (iii) Frisina Group
- (iv) Corpveil Holdings Ltd.
- (v) NHDG (Waterfront) Inc.
- (vi) Hamilton Homebuilders and Developers
- (vii) Alexander Place
- (viii) Dina D'Ermo
- (ix) D. Christopher Ashwin
- (x) Patrick and Deborah Doran
- (xi) Denise O'Connor
- (xii) Marie Nutter
- (xiii) Alysha Read
- (xiv) Cathie Botelho
- (xv) MaryAnn Hudecki Thompson
- (xvi) Isadora Van Riemsdjik
- (xvii) Bill and Gail Lorimer
- (xviii) Rachelle Sender
- (xix) Ingrid Hengemuhle
- (xx) Teresa Gerenscer
- (xxi) Kelly Holt
- (xxii) John Boddy
- (xxiii) Elaine De Ruiter
- (xxiv) Renee Perazzo
- (xxv) Ed and Edda engel
- (xxvi) Jason Hindle
- (xxvii) Ron and Mary Sealey
- (xxviii) Reuven Dukas
- (xxix) Monica Palkowski
- (xxx) Lyn and Rick Folkes
- (xxxi) DD Crowley
- (xxxii) Don Edwards
- (xxxiii) Brenda Alcock
- (xxxiv) Rick and Linda Jones
- (xxxv) Harriet Woodside
- (xxxvi) Kevin Speers
- (xxxvii) Erin Schacklette
- (xxxviii) Erin Mallon
- (xxxix) Alex Berze
- (xl) Leah Avery
- (xli) Don Ryter
- (xlii) Cynthia Meyer

- (xliii) Eric Canton
- (xliv) Sandy Leyland
- (xlv) Illyria Volcansek
- (xlvi) Ed Fothergill
- (xlvii) Nathalie Belu
- (xlviii) Jaleen Grove
- (xlix) Margo May Taylor
- (I) Deb Peace
- (li) Ibro Kuranovich and Damir Sebesta
- (lii) Wyn Andress
- (liii) Jill Tonini
- (liv) Kris Gadjanski
- (lv) Doug Rich
- (Ivi) Patty Haardeng
- (Ivii) Lori Cefaloni
- (Iviii) Margot Olivieri
- (lix) Rob Stovel
- (lx) Lynn MacLennan
- (lxi) Rose Janson
- (Ixii) Nancy Hurst
- (Ixiii) Karen Pingree
- (Ixiv) Melynda Paterson
- (Ixv) Simon Woodside
- (Ixvi) Zoe Green
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- (Ixviii) Laura Katz
- (Ixix) Conner Harris
- (lxx) Craig Burley
- (Ixxi) Ian Cooke
- (Ixxii) Warren Caldwell
- (Ixxiii) Graham Roebuck
- (Ixxiv) William Hill
- (lxxv) Jan Jansen
- (Ixxvi) John McBrien
- (Ixxvii) Henry Muggah and Elizabeth Crookshank/Muggah
- (Ixxviii) Emily Kam
- (Ixxix) Michelle Webb
- (lxxx) Marion Redman
- (Ixxxi) Doris Khes
- (Ixxxii) Kay Chornook
- (Ixxxiii) Lauren Tindall
- (Ixxxiv) Patricia Baker
- (lxxxv) Mark Forler
- (Ixxxvi) Nonni Iler
- (Ixxxvii) Debbie Edwards and Rick Csiernik
- (Ixxxviii) Lynn Prince
- (Ixxxix) Steven Romphf

- (xc) Laurie Nielsen
- (xci) Adan Amer
- (xcii) Chong Long
- (xciii) Corbett Land Strategies
- (xciv) Allyn Walsh
- (xcv) Nicole Smith
- (xcvi) Laura Cox
- (xcvii) The Cadillac Fairview Corporation Limited
- (xcviii) Sidana Holdings and 2474314 Ontario Inc.
- (xcix) Michelle Tom
- (c) Ken Stone
- (ci) Marie Covert
- (cii) Joe Minor
- (ciii) Hammer GP LP and Hammer GP Services Corp.
- (civ) Liz Koblyk
- (cv) Isabel Belanger
- (cvi) Frances Murray
- (cvii) Kathryn Cowan
- (cviii) Duncan Appleford
- (cix) Susan Wortman
- (cx) Donna Spurr
- (cxi) Spencer Steenburgh
- (cxii) Andrea Abeysakara

The following Delegations (Item 9.2(b)) addressed the Committee:

- (i) Michael Collins-Williams, West End Home Builders' Association
- (ii) John Corbett, Corbett Land Strategies
- (iii) Nick Wood, Corbett Land Strategies
- (iv) Lynda Lukasik, Environment Hamilton
- (v) Craig Burley

The following Delegations (Item 9.2(b)), were received:

- (i) Michael Collins-Williams, West End Home Builders' Association
- (ii) John Corbett, Corbett Land Strategies
- (iii) Nick Wood, Corbett Land Strategies
- (iv) Lynda Lukasik, Environment Hamilton
- (v) Craig Burley

The public meeting was closed.

(a) That the draft Urban Hamilton Official Plan Amendment, attached as Appendix "A" to Report PED21067(b), which updates the Official Plan to conform with Provincial planning policies and which implements the direction given by the General Issues Committee Decision on November 19, 2021 for a No Urban Boundary

Expansion growth option, as part of the City's Growth Related Integrated Development Strategy 2, be APPROVED, and submitted to the Minister of Municipal Affairs and Housing for approval, in accordance with the requirements of the Planning Act on the following basis:

- (i) That the draft Official Plan Amendment, attached as Appendix "A" to Report PED21067(b), which has been prepared in a form satisfactory to the City Solicitor, be enacted by Council;
- (b) That the draft Rural Hamilton Official Plan Amendment, attached as Appendix "B" to Report PED21067(b), which updates the Official Plan to conform with Provincial planning policies and which implements the direction given by the General Issues Committee Decision on November 19, 2021 for a No Urban Boundary Expansion growth option, as part of the City's Growth Related Integrated Strategy 2, be APPROVED, and submitted to the Minister of Municipal Affairs and Housing for approval, in accordance with the requirements of the Planning Act on the following basis:
 - (i) That the draft Official Plan Amendment, attached as Appendix "B" to Report PED21067(b), which has been prepared in a form satisfactory to the City Solicitor, be enacted by Council;
- (c) That upon adoption of the draft Urban Hamilton Official Plan Amendment and Rural Hamilton Official Plan Amendment, attached as Appendices "A" and "B" respectively to Report PED21067(b), Planning staff be directed and authorized to prepare the implementing Zoning By-law Amendments to the Zoning By-laws of the former Communities of Ancaster, Dundas, Flamborough, Glanbrook, former City of Hamilton, and Stoney Creek and schedule a statutory public meeting of the Planning Committee to consider the proposed changes to the Zoning By-laws of the former Communities.

The recommendations in Report PED21067(b) were **amended** by adding the following sub-section (d):

(d) That in order to advance the City's work to implement an Inclusionary Zoning Framework within the City of Hamilton, staff be directed to incorporate into the Municipal Comprehensive Review Phase One Official Plan Amendment, a schedule identifying the conceptual locations of the City's Major Transit Stations Areas (MTSAs) and a policy indicating

the City's intent to implement an Inclusionary Zoning Framework with respect to those MTSAs (Major GO Stations and LRT stops).

The recommendations in Report PED21067(b) were **amended** by adding the following sub-section (e):

(e) That the public submissions regarding this matter were received and considered by the Committee in approving the application.

For disposition of this matter, refer to Item 4.

(g) PRIVATE AND CONFIDENTIAL (Item 14)

The Committee determined they did not have to move into Closed Session for Item 14.1.

- (i) Closed Minutes May 3, 2022 (Item 14.1)
 - (a) That the Closed Session Minutes dated May 3, 2022, be approved, as presented; and,
 - (b) That the Closed Session Minutes dated May 3, 2022, remain private and confidential.

(h) ADJOURNMENT (Item 15)

There being no further business, the Planning Committee adjourned at 12:57 p.m.

	Councillor B. Johnson Chair, Planning Committee
Lisa Kelsey Legislative Coordinator	3 • • • • • • • • • • • • • • • • • • •



GENERAL ISSUES COMMITTEE REPORT 22-010

9:30 a.m. Wednesday, May 18, 2022

Due to COVID-19 and the Closure of City Hall, this meeting was held virtually.

Present: Mayor F. Eisenberger, Deputy Mayor M. Wilson (Chair)

Councillors N. Nann, S. Merulla, R. Powers, E. Pauls, J. P. Danko, B. Clark, M. Pearson, B. Johnson, L. Ferguson, A. VanderBeek,

J. Partridge, T. Whitehead

Absent: Councillor J. Farr and T. Jackson – Personal

THE GENERAL ISSUES COMMITTEE PRESENTS REPORT 22-011, AND RESPECTFULLY RECOMMENDS:

1. Corporate Asset Management Information Report (PW22037) (City Wide) (Item 7.1)

That Report PW22037, respecting the Corporate Asset Management Information Report, be received.

2. Business Improvement Area Advisory Committee Minutes 22-004, April 12, 2022 (Item 7.2)

That the Business Improvement Area Advisory Committee Minutes 22-004, April 12, 2022, be received.

3. Clerks Report for the Advisory Committee for Persons with Disabilities Report 22-005, May 10, 2022 (Item 7.3)

That the Clerks Report for the Advisory Committee for Persons with Disabilities Report 22-005, May 10, 2022, be received.

4. Hamilton Immigration Partnership Council – Annual Update (PED22111) (City Wide) (Item 8.2)

That Report PED22111, respecting the Hamilton Immigration Partnership Council – Annual Update, be received.

5. Lease Agreement – Lister Block, Unit 106, 28 James Street North (PED22086) (Ward 2) (Item 10.1)

- (a) That a Lease Agreement between City of Hamilton (Lessor) and 2637143 Ontario Inc. dba Electric Diner (Lessee), for the subject premises located as identified in Appendix "A" to Report PED22086 and based substantially on the terms and conditions outlined in Appendix "B" to Report PED22086, and such other terms and conditions deemed appropriate by the General Manager of Planning and Economic Development, be approved and entered into by the City of Hamilton;
- (b) That all rental proceeds including percentage rent and operating cost recoveries, from the Lease Agreement with 2637143 Ontario Inc. dba Electric Diner (Lessee) be credited to Account No.46010-790016;
- (c) That all costs, including any Lessor work outlined in Appendix "B" to Report PED22086, related to the Lease Agreement with 2637143 Ontario Inc. dba Electric Diner (Lessee), including real estate and legal costs of \$33,885, be authorized and be funded from Account No. 55778-790016 and credited to Account No. 55778-812036 (Real Estate Admin Recovery);
- (d) That the General Manager, Planning and Economic Development Department or designate, acting on behalf of the City as Lessor, be authorized to administer the Lease Agreement with 2637143 Ontario Inc. dba Electric Diner (Lessee) and provide any requisite consents, approvals, and notices related to the Lease Agreement with 2637143 Ontario Inc. dba Electric Diner (Lessee);
- (e) That the City Solicitor be authorized to amend and waive terms and conditions on such terms as considered reasonable to complete the leasing transaction, respecting the Lease Agreement with 2637143 Ontario Inc. dba Electric Diner (Lessee);
- (f) That the Mayor and Clerk be authorized and directed to execute the Lease Agreement with 2637143 Ontario Inc. dba Electric Diner (Lessee), or such other form and all other necessary associated documents with all such documents to be in a form satisfactory to the City Solicitor; and,

(g) That Appendix "B" to Report PED22086 respecting Lease Agreement – Lister Block, Unit 106, 28 James Street North remain confidential and not be released as a public document.

6. Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate (PED19168(c)) (Ward 14) (Item 10.2)

- (a) That a Lease Agreement between City of Hamilton (Lessor) and The Cardus Institute (Lessee), for the subject property located as identified in Appendix "A" to Report PED19168(c) and based substantially on the terms and conditions outlined in Appendix "B" to Report PED19168(c), and such other terms and conditions deemed appropriate by the General Manager of Planning and Economic Development, be approved and entered into by the City of Hamilton;
- (b) That the Tourism and Culture Division of the Planning and Economic Development Department be authorized to retain on a temporary basis or allocate existing City staff as a Project Manager, designated in such capacity to oversee the initial renovations to be undertaken by The Cardus Institute, and to off-set through Dept. ID Account No. 45408-792623 for such Project Manager costs to be invoiced and fully recovered from The Cardus Institute as Lessee against this expense;
- (c) That any other revenue proceeds that may come due and payable by The Cardus Institute, be received into Dept ID. Account No. 45408-792623;
- (d) That all costs related to the Lease Agreement, including the real estate and legal costs of \$41,375 plus applicable HST, be recovered from The Cardus Institute as Lessee and credited to Dept. ID Account No. 45408-812036;
- (e) That the General Manager, Planning and Economic Development Department or designate, acting on behalf of the City as Lessor, be authorized to administer the Lease Agreement and provide any requisite consents, approvals, and notices related to the Lease Agreement;
- (f) That the City Solicitor be authorized to amend and waive terms and conditions on such terms as considered reasonable to complete the leasing transaction, respecting the Lease Agreement with The Cardus Institute;
- (g) That the Mayor and City Clerk be authorized and directed to execute the Lease Agreement with The Cardus Institute or such other form and all other necessary associated documents with all such documents to be in a form satisfactory to the City Solicitor; and,

(h) That Appendix "B" to Report PED19168(c) remain confidential and not be released until completion of this real estate leasing transaction and receipt of approvals by the Ontario Heritage Trust towards the work to be undertaken by The Cardus Institute for its adaptive re-use of the Balfour House/Chedoke Estate.

7. Commonwealth Games 2030 Update (PED19108(h)) (City Wide) (Item 10.3)

- (a) That the Mayor be authorized and directed to sign an updated letter of endorsement to host the 2030 Commonwealth Games which acknowledges that the City may be a financial contributor towards the planning, delivery and legacies of the 2030 Commonwealth Games, which letter shall be added to Hamilton100's Final Hosting Proposal submission;
- (b) That the General Manager of Planning and Economic Development, or their designate, be authorized and directed to revise the Memorandum of Understanding (MOU) between the City and Hamilton100 to confirm:
 - (i) Hamilton100s commitment to lead the development of the 2030 Commonwealth Games Hosting Proposal for a potential Canadian bid;
 - (ii) The scope of work Hamilton100 are assuming; and
 - (iii) The role and resources required from the City of Hamilton to support the Proposal. Such revised MOU shall be in a form satisfactory to the City Solicitor and staff shall report back to the General Issues Committee (GIC) for direction upon completion of the revised MOU;
- (c) That staff be directed to develop and execute supportive communications messaging utilizing City corporate channels regarding the potential hosting of the 2030 Commonwealth Games;
- (d) That staff advocate for Provincial and Federal financial support of the 2030 Commonwealth Games as part of the City's government relations activities; and,
- (e) That staff be directed to liaise with sport hosting related staff from the Provincial and Federal governments and Commonwealth Games Canada to: identify the City's interest in potential participation in a proposed Multi-Party Agreement process; identify the City resources required to do so; and, report back to the General Issues Committee for direction.

8. Hamilton Ukrainian Humanitarian Crisis Response (HSC22029) (City Wide) (Item 10.4)

That Report HSC22029, respecting the Hamilton Ukrainian Humanitarian Crisis Response, be received.

9. Depaying Initiatives on Barton Street in Ward 3 (Item 11.1)

WHEREAS, Green Venture is a registered not-for-profit charity focussed on empowering Hamiltonians to implement greener practices in their homes and communities to make our city a climate champion;

WHEREAS, Green Venture has been leading the "Depave Barton" initiative in partnership with the Barton Village BIA for the past three years to depave City boulevards and plant trees, gardens and install seating areas in order to reduce stormwater runoff, mitigate climate change, and beautify the Barton Village area; and.

WHEREAS, through Report PW21073 "Investing in City Roads and Sidewalks Infrastructure with Canada Community - Building Funds" Council approved funding in the amount of \$50,000 in the 2022 Capital Budget for "Barton St Boulevards and Depaving" in Ward 3;

THEREFORE, BE IT RESOLVED:

- (a) That the General Manager of Planning and Economic Development be authorized and directed to provide funding up to a maximum of \$50,000 to Green Venture for capital costs associated with depaving initiatives on Barton Street in Ward 3 to be funded from the Council-approved Canada Community-Building Funds Capital Project ID #403211103;
- (b) That the funding for the depaving initiatives on Barton Street in Ward 3 be restricted to capital costs associated with the depaving initiative and be restricted to works undertaken on City-owned lands and boulevards; and,
- (c) That the General Manager of Planning and Economic Development be authorized and directed to execute any necessary agreements for the provision of the funding to Green Venture for the depaying initiatives on Barton Street in Ward 3, in a form satisfactory to the City Solicitor.

10. Potential Costs Associated with the Termination of Non-Vaccinated City Employees (Item 11.2)

WHEREAS, the City of Hamilton is proceeding with the Mandatory COVID-19 Vaccination Policy that may result in the termination of approximately 500 employees on or after June 1, 2022; and,

WHEREAS, the City of Hamilton may incur costs associated with enacting this policy including but not limited to: the hiring and training of new employees, all legal costs associated with any grievance hearings, arbitration rulings, reinstatement orders including lost wages and/or any subsequent wrongful dismissal claims;

THEREFORE, BE IT RESOLVED:

That the appropriate staff be directed to report to a future General Issues Committee with all costs including, but not limited to the hiring and training of new employees, all legal costs associated with any grievance hearings, arbitration rulings, reinstatement orders including lost wages, and/or any subsequent wrongful dismissal claims associated with the potential termination of approximately 500 employees who may be in non-compliance with the City of Hamilton Vaccination Policy.

11. Motion to Repeal By-law 20-044, COVID-19 Emergency Delegated Authority (Item 11.3)

WHEREAS, Council enacted the COVID-19 Emergency Delegated Authority Bylaw (By-law No. 20-044) on March 20, 2020 to delegate certain authorities to the City Manager;

WHEREAS, on May 10, 2022, the Mayor of the City of Hamilton declared that the emergency related to COVID-19 was terminated pursuant to the *Emergency Management and Civil Protection Act*, R.S.O 1990, CHAPTER E.9; and,

WHEREAS, Council has concluded that there is no longer a need to delegate the authorities outlined in By-law No. 20-044 to the City Manager;

THEREFORE, BE IT RESOLVED:

That By-law 20-044, COVID-19 Emergency Delegated Authority By-law, be repealed.

12. Surplus and Disposition of City-Owned Lands (PED22109) (Ward 12) (Item 14.2)

- (a) That the City-owned lands (two parcels), as shown in Appendix "A" attached to Report PED22109 and described in Appendix "B" attached to Report PED22109, be declared surplus for the purposes of disposition;
- (b) That Offers to Purchase, for the sale of City-owned lands (two parcels) as shown in Appendix "A" attached to Report PED22109 and described in Appendix "B" attached to Report PED22109, substantially on terms and conditions outlined in Appendix "B" attached to Report PED22109, and on such other terms and conditions deemed appropriate by the General Manager, Planning and Economic Development Department, be approved;
- (c) That the General Manager, Planning and Economic Development Department, or designate, acting on behalf of the City as land owner, be authorized and directed to provide any requisite consents, approvals and notices related to any applications for land use approval related to the Surplus and Disposition of City-Owned Lands;
- (d) That staff be authorized and directed to transfer \$41 K, for recovery of expenses including appraisal, due diligence, property management and real estate and legal fees, of the proceeds of sale to Dept. ID Account No. 59806-812036 (Real Estate – Admin Recovery), and that the net proceeds of sale related to the Surplus and Disposition of City-Owned Lands be deposited to Project ID Account No. 47702-3561850200 (Property Purchases and Sales);
- (e) That the City Solicitor be authorized and directed to complete the transactions related to the Surplus and Disposition of City-Owned Lands, as shown in Appendix "A" attached to Report PED22109, on behalf of the City, including paying any necessary expenses, amending the closings, due diligence and other dates, and amending and waiving terms and conditions on such terms as considered reasonable:
- (f) That the Mayor and City Clerk be authorized and directed to execute any necessary documents respecting the Surplus and Disposition of City-Owned Lands, as shown in Appendix "A" attached to Report PED22109, in a form satisfactory to the City Solicitor;
- (g) That Report PED22109, respecting the Surplus and Disposition of City-Owned Lands in Ward 12 remain confidential until final completion of the real estate transactions.

13. Contractor Service Update (PW20057(b)) (City Wide) (Item 14.5)

That Report PW20057(b), respecting the Contractor Service Update, be received and remain confidential.

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

The Committee Clerk advised of the following changes to the agenda:

5. COMMUNICATIONS

5.2. Correspondence from The Honourable Peter Bethlenfalvy, Minister of Finance, in response to the City's request to establish a Vacant Home Tax for the purposes of improving housing supply and choice in Hamilton (Referred by Council at its meeting of May 11, 2022)

Recommendation: Be received and referred to the consideration of Item 10.5.

- 5.3. Correspondence respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update
 - a. Matt Jelly
 - b. Ryan LaFlamme
 - c. Peter Vander Klippe

Recommendation: Be received and referred to the consideration of Item 10.3.

5.4 Correspondence from Victoria Balfour respecting Item 10.2 - Report PED19168(c), Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate

Recommendation: Be received and referred to the consideration of Item 10.4.

6. DELEGATION REQUESTS

- 6.2 Dr. Sarah Sheehan, respecting Item 10.4 Report PED19168(c), respecting the Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate (For today's GIC)
- 6.3. Craig Burley respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update (For today's GIC)
- 6.4. Karl Andrus, Hamilton Community Benefits Network, respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update (For today's GIC)

10. DISCUSSION ITEMS

 Deferred Sub-sections (b) though (d) to Report FCS21017(b), respecting a Vacant Home Tax

(DEFERRED by the General Issues Committee at its meeting of February 2, 2022 pending a response from the Minister of Finance)

14. PRIVATE & CONFIDENTIAL

14.5 Contractor Service Update (PW20057(b)) (City Wide)

Pursuant to Section 9.1, Sub-sections (j) and (k) of the City's Procedural By-law 21-021, as amended, and Section 239(2), Sub-sections (j) and (k) of the *Ontario Municipal Act*, 2001, as amended, as the subject matter pertains to a trade secret or scientific, technical, commercial or financial information that belongs to the municipality or local board and has monetary value or potential monetary value; and, 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.

The agenda for the May 18, 2022 General Issues Committee meeting was approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

- (i) Councillor M. Pearson declared a disqualifying Interest to Item 10.5, respecting the Deferred Sub-sections (b) though (d) to Report FCS21017(b), respecting a Vacant Home Tax, as she and her husband are residential rental property landlords.
- (ii) Councillor A. VanderBeek declared a disqualifying Interest to Item 10.5, respecting the Deferred Sub-sections (b) though (d) to Report FCS21017(b), respecting a Vacant Home Tax, as she and her family are residential rental property landlords.
- (iii) Councillor S. Merulla declared a disqualifying Interest to Item 10.5, respecting the Deferred Sub-sections (b) though (d) to Report FCS21017(b), respecting a Vacant Home Tax, as he and his wife are residential rental property landlords.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)

(i) May 4, 2022 (Item 4.1)

The Minutes of the May 4, 2022 General Issues Committee meeting were approved, as presented.

(d) COMMUNICATION ITEMS (Item 5)

(i) Correspondence respecting Item 11.2, Potential Costs Associated with the Termination of Non-Vaccinated City Employees (Item 5.1)

The following correspondence, respecting Item 11.2, Potential Costs Associated with the Termination of Non-Vaccinated City Employees, was received and referred to the consideration of Item 11.2:

- (1) Harry Droogendyk (Item 5.1.a.)
- (2) Yvonne Vlietstra (Item 5.1.b.)

For disposition of this matter, please refer to Item 10.

(ii) Correspondence from The Honourable Peter Bethlenfalvy, Minister of Finance, in response to the City's request to establish a Vacant Home Tax for the purposes of improving housing supply and choice in Hamilton (Item 5.2)

The correspondence from The Honourable Peter Bethlenfalvy, Minister of Finance, in response to the City's request to establish a Vacant Home Tax for the purposes of improving housing supply and choice in Hamilton, was received and referred to the consideration of Item 10.5.

For disposition of this matter, please refer to Information Item (h)(ii).

(iii) Correspondence respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update (Item 5.3)

The following correspondence respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update, was received and referred to the consideration of Item 10.3:

- (1) Matt Jelly (Item 5.3.a.)
- (2) Ryan LaFlamme (Item 5.3.b.)
- (3) Peter Vander Klippe (Item 5.3.c.)

For disposition of this matter, please refer to Item 7.

(iv) Correspondence from Victoria Balfour respecting Item 10.2 - Report PED19168(c), Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate (Item 5.4)

The correspondence from Victoria Balfour respecting Item 10.2 - Report PED19168(c), Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate, was received and referred to the consideration of Item 10.2.

For disposition of this matter, please refer to Item 6.

(e) DELEGATION REQUESTS (Item 6)

(i) Vic Djurdjevic, Nikola Tesla Educational Corporation, to present a Cheque to the City for the Public Art Project and to Update the City on NTEC Initiatives (Item 6.1)

The delegation request, submitted by Vic Djurdjevic, Nikola Tesla Educational Corporation, to present a cheque to the City for the public art project and to update the City on NTEC Initiatives, was approved for a future General Issues Committee meeting.

(ii) Dr. Sarah Sheehan, respecting Item 10.4 – Report PED19168(c), respecting the Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate (Item 6.2)

The delegation request submitted by Dr. Sarah Sheehan, respecting Item 10.4 – Report PED19168(c), respecting the Proposal for the Adaptive Reuse of Balfour House/Chedoke Estate, was approved for today's General Issue Committee meeting.

(iii) Craig Burley respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update (Item 6.3)

The delegation request submitted by Craig Burley, respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update, was approved for today's General Issues Committee meeting.

(iv) Karl Andrus, Hamilton Community Benefits Network, respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update (Item 6.4)

The delegation request submitted by Karl Andrus, Hamilton Community Benefits Network, respecting Item 10.3, Report PED19108(h), Commonwealth Games 2030 Update, was approved for today's General Issues Committee.

(f) STAFF PRESENTATIONS (Item 8)

(i) COVID-19 Verbal Update (Item 8.1)

Jason Thorne, General Manager of the Planning & Economic Development Department and Director of the Emergency Operations

Centre; and, Dr. Elizabeth Richardson, Medical Officer of Health, provided the verbal update respecting COVID-19.

The verbal update respecting COVID-19 was received.

(ii) Hamilton Immigration Partnership Council – Annual Update (PED22111) (City Wide) (Item 8.2)

Sarah Wayland, Senior Project Manager, introduced the presenter for Report PED22111, respecting the Hamilton Immigration Partnership Council – Annual Update.

Rashed Afif, of Wesley, provided the PowerPoint presentation respecting Report PED22111 – Hamilton Immigration Partnership Council – Annual Update.

The presentation respecting Report PED22111 – Hamilton Immigration Partnership Council – Annual Update, was received.

For disposition of this matter, please refer to Item 4.

(g) DELEGATIONS (Item 9)

(i) Louis Frapporti and P.J. Mercanti, Hamilton100 Commonwealth Games Committee, respecting an update on the 2030 Commonwealth Games Bid Initiative (Item 9.1)

The 5-minute speaking limit, outlined in sub-section (6), Section 5.12 – Delegations, of the Procedural by law 21-021, as amended, was waived and the delegation be permitted to take the appropriate time required to provide the information to Committee.

Louis Frapporti, P.J. Mercanti and Nancy Di Gregorio, Hamilton100 Commonwealth Games Committee, provided a PowerPoint presentation respecting the update on the 2030 Commonwealth Games Bid Initiative.

The presentation provided by Louis Frapporti, P.J. Mercanti, and Nancy Di Gregorio, Hamilton100 Commonwealth Games Committee, respecting an update on the 2030 Commonwealth Games Bid Initiative, was received.

For disposition of this matter, please refer to Item 7.

(ii) Dr. Sarah Sheehan, respecting Item 10.4 – Report PED19168(c), respecting the Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate (Item 9.2)

Dr. Sarah Sheehan, addressed Committee respecting Item 10.4, Report PED19168(c) - Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate.

The presentation provided by Dr. Sarah Sheehan, respecting Item 10.4, Report PED19168(c) – Proposal for the Adaptive Re-use of Balfour House/Chedoke Estate, was received.

For disposition of this matter, please refer to Item 8.

(iii) Craig Burley respecting Item 10.3, Report PED19108(h) – Commonwealth Games 2030 Update (Item 9.3)

Craig Burley addressed Committee respecting Item 10.3, Report PED19108(h) – Commonwealth Games 2030 Update.

The presentation provided by Craig Burley, respecting Item 10.3, Report PED19108(h) – Commonwealth Games 2030 Update, was received.

For disposition of this matter, please refer to Item 7.

(iv) Karl Andrus, Hamilton Community Benefits Network, respecting Item 10.3, Report PED19108(h) – Commonwealth Games 2030 Update (Item 9.4)

Karl Andrus, Hamilton Community Benefits Network, addressed Committee respecting Item 10.3, Report PED19108(h) – Commonwealth Games 2030 Update.

The presentation provided by Karl Andrus, Hamilton Community Benefits Network, respecting Item 10.3, Report PED19108(h) – Commonwealth Games 2030 Update, was received.

For disposition of this matter, please refer to Item 7.

The General Issues Committee recessed for one half hour until 12:35 p.m.

(h) DISCUSSION ITEMS (Item 10)

The following Amendment was DEFEATED:

(i) Commonwealth Games 2030 Update (PED19108(h)) (City Wide) (Item 10.3)

Sub-section (a) to Report PED19108(h), *be amended*, by deleting the words "*which acknowledges that the City may be a financial contributor towards the planning, delivery and legacies of the 2030 Commonwealth Games*", to read as follows:

(a) That the Mayor be authorized and directed to sign an updated letter of endorsement to host the 2030 Commonwealth Games, which acknowledges that the City may be a financial contributor towards the planning, delivery and legacies of the 2030 Commonwealth Games, which letter shall be added to Hamilton100's Final Hosting Proposal submission;

For disposition of this matter, please refer to Item 7.

(ii) Deferred Sub-sections (b) though (d) to Report FCS21017(b), respecting a Vacant Home Tax (Item 10.5)

Sub-sections (b) though (d) of Report FCS21017(b), respecting a Vacant Home Tax, which read as follows, was further DEFERRED to the June 1, 2022 General Issues Committee, with inclusion of the original report to be placed on that agenda for reference:

- (b) That the 2022 implementation costs, estimated at \$2,600,000 for the Vacant Home Tax to be funded through an internal loan plus interest from the Investment Stabilization Reserve (110046) to be repaid from revenues collected from the program over a 5-year term, be approved;
- (c) That the estimated gross annual operating costs of \$2,200,000 for administration of the Vacant Home Tax Program and related 16 Full Time Equivalents (FTE), to be funded from revenues generated by the program, be referred to the 2022 Budget Process for consideration; and,
- (d) That the matter respecting Vacant Home Tax, be removed from the General Issues Committee's Outstanding Business.

(i) MOTIONS (Item 11)

(i) Potential Costs Associated with the Termination of Non-Vaccinated City Employees (Item 11.2)

The Motion, respecting the Potential Costs Associated with the Termination of Non-Vaccinated City Employees, was amended by adding the words "to a future" and "all"; and, by deleting the words "estimate or range of all potential" and "estimated", to read as follows:

That the appropriate staff be directed to report to a future General Issues Committee with all estimate or range of all potential costs including, but not limited to the hiring and training of new employees, all estimated legal costs associated with any grievance hearings, arbitration rulings, reinstatement orders including lost wages, and/or any subsequent wrongful dismissal claims associated with the potential termination of approximately 500 employees who may be in non-compliance with the City of Hamilton Vaccination Policy.

For disposition of this matter, please refer to Item 10.

(j) PRIVATE & CONFIDENTIAL (Item 14)

- (i) Closed Session Minutes May 4, 2022 (Item 14.1)
 - (a) The Closed Session Minutes of the May 4, 2022 General Issues Committee meeting, were approved; and,
 - (b) The Closed Session Minutes of the May 4, 2022 General Issues Committee meeting, shall remain confidential.

Committee moved into Closed Session to discuss Items 14.2 and 14.5, pursuant to Section 9.1, Sub-sections (c), (j) and (k) of the City's Procedural By-law 21-021, as amended, and Section 239(2), Sub-sections (c), (j) and (k) of the *Ontario Municipal Act*, 2001, as amended, as the subject matters pertain to a proposed or pending acquisition or disposition of land by the municipality or local board; a trade secret or scientific, technical, commercial or financial information that belongs to the municipality or local board and has monetary value or potential monetary value; and, 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.

(i) Appendix B to Report PED22086 respecting the Lease Agreement – Lister Block, Unit 106, 28 James Street North (Item 14.3)

For disposition of this matter, please refer to Item 5.

(ii) Appendix B to Report PED19168(c) respecting the Adaptive Re-use of Balfour House/Chedoke Estate (Item 14.4)

For disposition of this matter, please refer to Item 6.

(I) ADJOURNMENT (Item 14)

There being no further business, the General Issues Committee adjourned at 7:03 p.m.

	Respectfully submitted,
	Maureen Wilson, Deputy Mayor Chair, General Issues Committee
Stephanie Paparella Legislative Coordinator, Office of the City Clerk	



AUDIT, FINANCE AND ADMINISTRATION COMMITTEE REPORT 22-010

9:30 a.m. May 19, 2022 Council Chambers Hamilton City Hall

Present: Councillors M. Pearson (Chair), B. Clark, B. Johnson, R. Powers, A.

VanderBeek, and M. Wilson

Absent: Councillor L. Ferguson – City Business

THE AUDIT, FINANCE AND ADMINISTRATION COMMITTEE PRESENTS REPORT 22-010 AND RESPECTFULLY RECOMMENDS:

1. Development Charges Indexing – Effective July 6, 2022 (FCS22039) (City Wide) (Item 7.2)

That Report FCS22039, respecting Development Charges Indexing – Effective July 6, 2022, be received.

- 2. Development Charges Reserves Status Report as of December 31, 2021 (FCS22040) (City Wide) (Item 7.3)
 - (a) That Report FCS22040, "Development Charges Reserves Status Report as of December 31, 2021", be received and made available to the public;
 - (b) That Report FCS22040, "Development Charges Reserves Status Report as of December 31, 2021", be forwarded, if requested, to the Ministry of Municipal Affairs and Housing.
- 3. Professional and Consultant Services Roster 2019 2021 (PW22035 / PED22123 / FCS22041) (City Wide) (Item 7.4)

That Report PW22035 / PED22123 / FCS22041, respecting Professional and Consultant Services Roster 2019 - 2021, be received.

4. Reserve / Revenue Fund Investment Performance Report - December 31, 2021 (FCS22032) (City Wide) (Item 7.5)

That Report FCS22032, respecting Reserve / Revenue Fund Investment Performance Report - December 31, 2021, be received.

5. Hamilton Future Fund Investment Performance Report - December 31, 2021 (FCS22033) (City Wide) (Item 7.6)

That Report FCS22033, respecting Hamilton Future Fund Investment Performance Report - December 31, 2021, be received.

6. Cemetery Trust Accounts Investment Performance Report - December 31, 2021 (FCS22034) (City Wide) (Item 7.7)

That Report FCS22034, respecting Cemetery Trust Accounts Investment Performance Report - December 31, 2021, be received.

7. 2021 Provincial Offences Administration Annual Report (FCS22026) (City Wide) (Item 7.8)

That Report FCS22026, respecting 2021 Provincial Offences Administration Annual Report, be received.

8. Proposed Write-off for Provincial Offences (FCS22027) (City Wide) (Item 10.1)

That staff be authorized to write-off the following outstanding Provincial Offences fines deemed uncollectible, in the total amount of \$2,889,903.07, as follows:

- (a) \$995,613.77 in uncollectible fines with a sentence date of December 31, 2014 and prior;
- (b) \$1,084.09 in underpayments from April 1, 2021 through March 31, 2022; and,
- (c) \$1,893,205.21 in fines held by persons deceased in 2021.

9. Parkland Dedication Reserve Status Report as of December 31, 2021 (FCS22022) (City Wide) (Item 10.2)

- (a) That Report FCS22022 "Parkland Dedication Reserve Status Report as of December 31, 2021" be received and made available to the public;
- (b) That Report FCS22022 "Parkland Dedication Reserve Status Report as of December 31, 2021" be forwarded, if requested, to the Ministry of Municipal Affairs and Housing.

10. Treasurer's Investment Report 2021 Fiscal Year by Aon (FCS22024) (City Wide) (Item 10.3)

That Report FCS22024 "Treasurer's Investment Report 2021 Fiscal Year by Aon", as provided to Council, be forwarded to the Hamilton Future Fund Board of Governors, for information.

11. Grants Sub-Committee Report 22-002 - May 9, 2022 (Item 10.4)

- (a) 2022 City Enrichment Funding Recommendations (GRA22002) (City Wide) (Item 5.1)
 - (i) That, the 2022 City Enrichment Fund recommended funding allocation, in the amount of \$6,098,732 (as outlined in the attached Revised Appendix "A" to AF&A Report 22-010), be approved;
 - (ii) That, Appendix "B" to Report GRA22002, Application Summary, be received;
 - (iii) That, Appendix "B" to AF&A Report 22-010, Payment Plan, be approved;
 - (iv) That, the Grants for the following organizations with outstanding arrears with the City Enrichment Fund, as of December 31, 2021 be approved and funding be withheld pending the full settlement of such arrears:
 - (1) AGR-A4 Golden Horseshoe Beekeepers' Association \$282.00;
 - (2) AGR-A5 Hamilton-Wentworth 4-H Association \$897.50;
 - (3) AGR-A10 Hamilton Wentworth Soil and Crop Improvement Association \$2,461.51;
 - (4) CCH-A12 Hamilton Folk Arts Heritage Council \$41,482.00;
 - (5) CCH-A14 South Asian Heritage Association of Hamilton & Region \$3,115.00;
 - (6) CCH-A40 Festitalia Corporation \$5,952.00; and,
 - (7) CCHA-53 Hamilton Santa Claus Parade Committee \$32,779.00;
 - (v) That, the following grants be approved, and funding be withheld, pending the submission of additional information, by July 20, 2022:
 - (1) AGR-15 Wentworth District Women's Institute;
 - (2) ART-A30 Industry Performance Makers Arts Organization;
 - (3) ART-D26 Reverend Marco D'Andrea;
 - (4) ART-B3 Greater Hamilton Arts and Events;
 - (5) CCH-A36 Stoney Creek BIA;

- (6) CCH-B1 Pride Hamilton;
- (7) SAL-A3 & SAL-B6 The Hamilton and District Soccer Association;
- (8) SAL-A4 Hamilton Ringette Association;
- (9) ART-A34 Chamber Music Hamilton;
- (10) CCH-A50 Flamborough Santa Claus Parade;
- (11) CCH-A51 Hamilton Waterfront Trust;
- (12) CCH-A52 Polish Symfonia Choir; and,
- (13) CCH-A53 Hamilton Santa Claus Parade Committee;
- (vi) That staff be directed to report back, before summer, with respect to the status of the organizations whose 2022 City Enrichment Fund grants are being withheld, pending full settlement of outstanding arrears, as shown below:
 - (1) AGR-A4 Golden Horseshoe Beekeepers' Association \$282.00
 - (2) AGR-A5 Hamilton-Wentworth 4-H Association \$897.50
 - (3) AGR-A10 Hamilton Wentworth Soil and Crop Improvement Association \$2,461.51
 - (4) CCH-A12 Hamilton Folk Arts Heritage Council \$41,482.00
 - (5) CCH-A14 South Asian Heritage Association of Hamilton & Region \$3,115.00
 - (6) CCH-A40 Festitalia Corporation \$5,952.00
 - (7) CCHA-53 Hamilton Santa Claus Parade Committee \$32,779.00;
- (vii) That staff be directed to report back, before summer, with respect to the status of those organizations whose 2022 City Enrichment Fund Grant is being withheld, pending the submission of additional Information, as shown below:
 - (1) AGR-15 Wentworth District Women's Institute
 - (2) ART-A30 Industry Performance Makers Arts Organization
 - (3) ART-D26 Reverend Marco D'Andrea
 - (4) ART-B3 Greater Hamilton Arts and Events

- (5) CCH-A36 Stoney Creek BIA(6) CCH-B1 Pride Hamilton
- (7) SAL-A3 & SAL-B6 The Hamilton and District Soccer Association
- (8) SAL-A4 Hamilton Ringette Association
- (9) ART-A34 Chamber Music Hamilton
- (10) CCH-A50 Flamborough Santa Claus Parade
- (11) CCH-A51 Hamilton Waterfront Trust
- (12) CCH-A52 Polish Symfonia Choir
- (13) CCH-A53 Hamilton Santa Claus Parade Committee; and,
- (viii) That, should an additional Grants Sub-committee meeting not be possible prior to summer, the Legislative Coordinator be permitted to place the forthcoming report directly on the Audit, Finance & Administration agenda.

(b) 2021 City Enrichment Funding Recommendations (GRA21002(a) / PED22122) (City Wide) (Item 6.1)

- (i) That 2021 City Enrichment Fund grant recipients in the Arts Creation and Presentation stream be given a project deadline extension until November 1, 2022, pending the receipt of a written request for said extension by the recipient to the Arts Program Manager by June 30, 2022; and,
- (ii) That any 2021 City Enrichment Fund grant recipients in the Arts Creation and Presentation stream who have withdrawn approved applications and returned surplus funds to the City of Hamilton be eligible to reactivate their project and be given a project deadline extension until November 1, 2022 pending the receipt of a written request for said extension by the recipient to the Arts Program Manager by June 30, 2022.

12. Support for the National Council of Canadian Muslims brought forward by the NCCM recommendations in Motion 6.2 (CM21015(b)) (City Wide) (Item 10.5)

- (a) That staff be directed to develop a pilot inclusion campaign to support equity-seeking community members and address issues of hate and intolerance focused on combatting racism, rooted in anti-oppression with a specific focus on Anti-Islamophobia;
- (b) That a city-wide public education campaign be developed and distributed, which includes in its development the engagement of City staff and

community members already engaged in related work, including but not limited to the National Council of Canadian Muslims, Hamilton Anti-Racism Resource Centre (HARRC), the Hamilton Centre for Civic Inclusion (HCCI), Hamilton Immigration Partnership Council (HIPC), and the No Hate in the Hammer Coalition; and,

- (c) That one-time funding for the pilot inclusion, public education, awareness and communications campaign of \$35,000 from the Tax Stabilization Reserve #110046 be approved.
- 13. Procurement of Liquid Chlorine in Railway Tank Cars for the Woodward Water and Wastewater Treatment Plants (FCS22050 / LS22025 / PW22047) (City Wide) (Added Item 14.2)
 - (a) That Council approve the single source procurement, pursuant to Procurement Policy #11 Non-competitive Procurements, for the supply and delivery of Liquid Chlorine to the City by Olin Canada ULC and that the General Manager, Public Works Department be authorized to enter into and execute a Contract and any necessary agreements and ancillary documents required to give effect thereto, all in a form satisfactory to the City Solicitor;
 - (b) That Report FCS22050 / LS22025 / PW22047, respecting Procurement of Liquid Chlorine in Railway Tank Cars for the Woodward Water and Wastewater Treatment Plants, remain confidential; and,
 - (c) That staff be directed to prepare an information report back to Audit Finance & Administration Committee with the total annual contract price for the supply and delivery of Liquid Chlorine in Railway Tank Cars for the Woodward Water and Wastewater Treatment Plants, following the execution of the agreement.

FOR INFORMATION:

(a) CHANGES TO THE AGENDA (Item 2)

The Committee Clerk advised of the following changes to the agenda:

- 6. DELEGATION REQUESTS (Item 6)
 - 6.1 Karl Andrus, Hamilton Community Benefits Network (HCBN), respecting Community Benefits Charge (For a future meeting)
- 12. NOTICES OF MOTION (Item 12)
 - 12.1 City Enrichment Fund Budget Request
- 14. PRIVATE AND CONFIDENTIAL (Item 14)

14.2 Procurement of Liquid Chlorine in Railway Tank Cars for the Woodward Water and Wastewater Treatment Plants (FCS22050 / LS22025 / PW22047) (City Wide)

The agenda for the May 19, 2022 Audit, Finance and Administration Committee meeting was approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

There were no declarations of interest.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)

(i) April 21, 2022 (Item 4.1)

The Minutes of the April 21, 2022 meeting of the Audit, Finance and Administration Committee were approved, as presented.

(d) DELEGATION REQUESTS (Item 6)

(i) Karl Andrus, Hamilton Community Benefits Network (HCBN), respecting Community Benefits Charge (For a future meeting) (Added Item 6.1)

The delegation request from Karl Andrus, Hamilton Community Benefits Network (HCBN), respecting Community Benefits Charge, was approved for a future meeting.

(e) CONSENT ITEMS (Item 7)

That the following Various Advisory Committee Minutes, were received:

- (i) Hamilton Mundialization Advisory Committee February 16, 2022 (Item 7.1(a))
- (ii) Hamilton Mundialization Advisory Committee No Quorum Notes April 20, 2022 (Item 7.1(b))
- (iii) Hamilton Women and Gender Equity Committee March 24, 2022 (Item 7.1(c))

(f) DISCUSSION ITEMS (Item 10)

- (i) Grants Sub-Committee Report 22-002 May 9, 2022 (Item 10.4)
 - (1) 2022 City Enrichment Funding Recommendations (GRA22002) (City Wide) (Item 5.1)
 - (a) That, the 2022 City Enrichment Fund recommended funding allocation, in the amount of \$6,088,340 (as outlined in the attached Appendix "A" to Report 22-002), be approved;

- (b) That, Appendix "B" to Report GRA22002, Application Summary, be received;
- (c) That, Appendix "B" to Report 22-002, Payment Plan, be approved;
- (d) That, the Grants for the following organizations with outstanding arrears with the City Enrichment Fund, as of December 31, 2021 be approved and funding be withheld pending the full settlement of such arrears:
 - (i) AGR-A4 Golden Horseshoe Beekeepers' Association \$282.00;
 - (ii) AGR-A5 Hamilton-Wentworth 4-H Association \$897.50;
 - (iii) AGR-A10 Hamilton Wentworth Soil and Crop Improvement Association \$2,461.51;
 - (iv) CCH-A12 Hamilton Folk Arts Heritage Council \$41,482.00;
 - (v) CCH-A14 South Asian Heritage Association of Hamilton & Region \$3,115.00;
 - (vi) CCH-A40 Festitalia Corporation \$5,952.00; and,
 - (vii) CCHA-53 Hamilton Santa Claus Parade Committee \$32,779.00;
- (e) That, the following grants be approved, and funding be withheld, pending the submission of additional information, by July 20, 2022:
 - (i) AGR-15 Wentworth District Women's Institute;
 - (ii) ART-A30 Industry Performance Makers Arts Organization;
 - (iii) ART-D26 Reverend Marco D'Andrea;
 - (iv) ART-B3 Greater Hamilton Arts and Events;
 - (v) CCH-A36 Stoney Creek BIA;
 - (vi) CCH-B1 Pride Hamilton;

- (vii) SAL-A3 & SAL-B6 The Hamilton and District Soccer Association:
- (viii) SAL-A4 Hamilton Ringette Association;
- (ix) ART-A34 Chamber Music Hamilton;
- (x) CCH-A50 Flamborough Santa Claus Parade;
- (xi) CCH-A51 Hamilton Waterfront Trust;
- (xii) CCH-A52 Polish Symfonia Choir; and,
- (xiii) CCH-A53 Hamilton Santa Claus Parade Committee;
- (f) That staff be directed to report back, before summer, with respect to the status of the organizations whose 2022 City Enrichment Fund grants are being withheld, pending full settlement of outstanding arrears, as shown below:
 - (i) AGR-A4 Golden Horseshoe Beekeepers' Association \$282.00
 - (ii) AGR-A5 Hamilton-Wentworth 4-H Association \$897.50
 - (iii) AGR-A10 Hamilton Wentworth Soil and Crop Improvement Association \$2,461.51
 - (iv) CCH-A12 Hamilton Folk Arts Heritage Council \$41,482.00
 - (v) CCH-A14 South Asian Heritage Association of Hamilton & Region \$3,115.00
 - (vi) CCH-A40 Festitalia Corporation \$5,952.00
 - (vii) CCHA-53 Hamilton Santa Claus Parade Committee \$32,779.00;
- (g) That staff be directed to report back, before summer, with respect to the status of those organizations whose 2022 City Enrichment Fund Grant is being withheld, pending the submission of additional Information, as shown below:
 - (i) AGR-15 Wentworth District Women's Institute
 - (ii) ART-A30 Industry Performance Makers Arts
 Organization

Council – May 25, 2022

(iii)	ART-D26	Reverend Marco D'Andrea
(iv) (v)	ART-B3 CCH-A36	Greater Hamilton Arts and Events Stoney Creek BIA
(vi)	CCH-B1	Pride Hamilton
(vii)	SAL-A3 & SAL-B6 The Hamilton and District Soccer Association	
(viii)	SAL-A4	Hamilton Ringette Association
(ix)	ART-A34	Chamber Music Hamilton
(x)	CCH-A50	Flamborough Santa Claus Parade
(xi)	CCH-A51	Hamilton Waterfront Trust
(xii)	CCH-A52	Polish Symfonia Choir
(xiii)	CCH-A53 Committee;	Hamilton Santa Claus Parade and,

(h) That, should an additional Grants Sub-committee meeting not be possible prior to summer, the Legislative Coordinator be permitted to place the forthcoming report directly on the Audit, Finance & Administration agenda.

(2) 2021 City Enrichment Funding Recommendations (GRA21002(a) / PED22122) (City Wide) (Item 6.1)

- (a) That 2021 City Enrichment Fund grant recipients in the Arts Creation and Presentation stream be given a project deadline extension until November 1, 2022, pending the receipt of a written request for said extension by the recipient to the Arts Program Manager by June 30, 2022; and,
- (b) That any 2021 City Enrichment Fund grant recipients in the Arts Creation and Presentation stream who have withdrawn approved applications and returned surplus funds to the City of Hamilton be eligible to reactivate their project and be given a project deadline extension until November 1, 2022 pending the receipt of a written request for said extension by the recipient to the Arts Program Manager by June 30, 2022.

Councillor Johnson introduced the following Amendment to the Motion:

WHEREAS, the City Enrichment Fund is the overall name for the City of Hamilton's municipal investment in a wide range of program areas that supports the City's strategic plan;

WHEREAS, the fund comprises 6 Program Areas (Agriculture, Arts, Communities, Culture & Heritage, Community Services, Environment, Sports & Active Lifestyles) with funding streams and categories;

WHEREAS, the City Enrichment Fund ran out of funds based on the 2022 City Enrichment Fund budget in two program areas despite applicants scoring successfully.

WHEREAS, the City Enrichment Fund online application platform did not allow stream switches once the application was submitted.

THEREFORE, BE IT RESOLVED:

That Item (1) 2022 City Enrichment Funding Recommendations (GRA22002) (City Wide) (Item 5.1), Sub-Section (a), be **amended**, to reflect the following **amendments** to Appendix "A":

- (a) That, the 2022 City Enrichment Fund recommended funding allocation, in the amount of \$6,098,732 (as outlined in the attached *Revised* Appendix "A" to Report 22-002), be approved;
 - (i) That staff be directed to access funds from the City Enrichment Fund reserve #112230 totalling \$2,500 to the Binbrook Parade Committee for the Binbrook Santa Claus Parade.
 - (ii) That staff be directed to access funds from the City Enrichment Fund reserve #112230 totalling \$7,892 to provide one-time funding to applications that received prior year funding, deemed to be disqualified (DNQ'd) this year, due to an improper stream selection who would have otherwise qualified for funding in the applicable stream.
 - (a) CCH-C5 Ottawa Street BIA Sew Hungry \$7,892

For further disposition of this matter, refer to Item 11.

(g) NOTICES OF MOTION (Item 12)

Councillor Johnson introduced the following Notice of Motion:

City Enrichment Fund Budget Request

WHEREAS, the City Enrichment Fund is the overall name for the City of Hamilton's municipal investment in a wide range of program areas that supports the City's strategic plan;

WHEREAS, the fund comprises 6 Program Areas (Agriculture, Arts, Communities, Culture & Heritage, Community Services, Environment, Sports & Active Lifestyles) with funding streams and categories;

WHEREAS, the last budget increase to the City Enrichment Fund was approved in 2019, to bring total budget allocation to \$6,088,340; and,

WHEREAS, the 2022 request from applicants totalled \$9,858,419; total value of eligible requests based on 2022 applications totalled \$8,110,633; funding allocation was capped at \$6,088,340 or 75% of the total request; THEREFORE, BE IT RESOLVED:

That an increase to the City Enrichment Fund be forwarded for consideration to the 2023 Budget submission.

(h) GENERAL INFORMATION / OTHER BUSINESS (Item 13)

The following amendments to the Audit, Finance & Administration Committee's Outstanding Business List, were approved:

(a) Items Considered Complete and Needing to Be Removed (Item 13.1(a)):

Correspondence from Trent Jarvis, Hamilton Waterfront Trust, respecting an update to the Audit, Finance and Administration Committee in April or May of 2022

Added: March 24, 2022 at AF&A - Item 5.2

Removed: April 27, 2022 at Council - Item 6.6(a)

OBL Item: 22-A

Support for the National Council of Canadian Muslims brought forward by the NCCM recommendations in Motion 6.2 (CM21015(a))

Added: March 24, 2022 at AF&A - Item 7.8 Removed: May 19, 2022 at AF&A - Item 10.5

OBL Item: 22-B

(i) PRIVATE AND CONFIDENTIAL (Item 14)

Committee determined that discussion of Item 14.1 was not required in Closed Session, therefore, the item was addressed in Open Session, as follows:

(i) Closed Minutes – April 21, 2022 (Item 14.1)

(a) The Closed Session Minutes of the April 21, 2022 Audit, Finance and Administration Committee meeting, were approved as presented; and,

(b) The Closed Session Minutes of the April 21, 2022 Audit, Finance and Administration Committee meeting, remain confidential.

Committee moved into Closed Session respecting Item 14.2 pursuant to Section 9.1, Sub-sections (f), (i) and (k) of the City's Procedural By-law 21-021, as amended, and Section 239(2), Sub-sections (f), (i) and (k) of the *Ontario Municipal Act, 2001*, as amended, as the subject matter pertains to advice that is subject to solicitor-client privilege, including communications necessary for that purpose; a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization; and, 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.

(ii) Procurement of Liquid Chlorine in Railway Tank Cars for the Woodward Water and Wastewater Treatment Plants (FCS22050 / LS22025 / PW22047) (City Wide) (Added Item 14.2)

That the recommendations **be amended**, by adding an additional subsection (c), to read as follows:

(c) That staff be directed to prepare an information report back to Audit Finance & Administration Committee with the total annual contract price for the supply and delivery of Liquid Chlorine in Railway Tank Cars for the Woodward Water and Wastewater Treatment Plants, following the execution of the agreement.

For further disposition of this matter, refer to Item 13.

(j) ADJOURNMENT (Item 15)

There being no further business, the Audit, Finance and Administration Committee adjourned at 10:33 a.m.

Respectfully submitted,

Councillor Pearson, Chair Audit, Finance and Administration Committee

Angela McRae Legislative Coordinator Office of the City Clerk

2022 City Enrichment Fund SUMMARY

		No. of	20	022 Budget						
	Category	Apps		(Total)	20	22 Requested	20	22 Approved	Budget vs /	Approved
	Community Services									
CS - A	Hunger/Shelter	9			\$	395,825	\$	330,838		
CS - B	Everyone Safe	9			\$	302,172	\$	286,846		
CS - C	Everyone Thrives	9			\$	296,164	\$	268,321		
CS - D	No Youth Left Behind	6			\$	197,192	\$	149,608		
CS - E	Everyone Age in Place	19			\$	474,008	\$	431,797		
CS - F	Community Capacity Grows	10			\$	212,973	\$	179,392		
CS - G	Someone to Talk to	3			\$	92,688	\$	72,496		
CS - H	Emerging Needs	46			\$	1,527,859	\$	517,389		
	Community Services Total	111	\$	2,164,360	\$	3,498,881	\$	2,236,687	-\$ 72,327	-3.34%
	Agriculture									
AGR A	Program & Events	15			\$	152,804	\$	109,389		
	Agriculture Total	15	\$	143,360	\$	152,804	\$	109,389	\$33,971	23.70%
	Arts									
ART - A	Arts - Operating	35			\$	3,968,178	\$	2,478,271		
ART - B	Arts - Festival	4			\$	190,000	_	116,010		
ART - C	Arts - Capacity Building	2			\$	28,850	\$	12,500		
ART - D	Arts - Creation & Presentation	28			\$	237,569	\$	114,793		
	Arts Total	69	\$	2,770,540	\$	4,424,597	\$	2,721,573	\$48,967	1.77%
	Environment									
ENV-A	Capacity Building	2			\$	48,000	\$	29,750		
ENV-C	Project and Programs	8			\$	181,000	\$	109,577		
	Environment Total	10	\$	146,390	\$	229,000	\$	139,327	\$7,063	4.82%
	Communities, Culture & Heritage									
CCH - A	CCH - Events	55			\$	964,120	\$	542,320		

Category	No. of Apps	20	022 Budget (Total)	2022 Requeste		2022 Approved		Budget vs Ap	proved
CCH - New Projects	7			\$	156,815	\$	49,500		
CCH - Capacity Building	5			\$	60,288	\$	9,737		
CCH Total	67	\$	567,700	\$	1,181,223	\$	601,557	-\$33,857	-5.96%
Sport and Active Lifestyles									
Long Term Athlete Dev (LTAD)	7			\$	51,575	\$	32,800		
Sport Awareness	6			\$	44,565	\$	31,938		
Capacity Building	8			\$	61,831	\$	37,816		
Sport for Development/Inclusion	4			\$	27,450	\$	27,450		
Accessibility	6			\$	50,019	\$	36,976		
Active for Life	12			\$	84,974	\$	60,673		
Multi-Sport Hosting	2			\$	51,500	\$	12,546		
Sport and Active Lifestyles Total	45	\$	245,990	\$	371,914	\$	240,199	\$5,791	2.35%
Total Traditional Grant Poguests	317	•	6 039 340	¢	0 959 /10	¢	6.049.732	-\$10.202	-0.17%
Total Traditional Grant Requests	317	Ψ	0,030,340	P	9,030,419	Φ	0,040,732	-\$10,392	-0.17 /0
CEF Administration			50,000				50,000	-	
Total City Enrichment Fund		\$	6,088,340	\$	9,858,419	\$	6,098,732	-\$10,392	-0.17%
	CCH - New Projects CCH - Capacity Building CCH Total Sport and Active Lifestyles Long Term Athlete Dev (LTAD) Sport Awareness Capacity Building Sport for Development/Inclusion Accessibility Active for Life Multi-Sport Hosting Sport and Active Lifestyles Total Total Traditional Grant Requests CEF Administration	Category CCH - New Projects 7 CCH - Capacity Building 5 CCH Total 67 Sport and Active Lifestyles Long Term Athlete Dev (LTAD) 7 Sport Awareness 6 Capacity Building 8 Sport for Development/Inclusion 4 Accessibility Active for Life 12 Multi-Sport Hosting 2 Sport and Active Lifestyles Total Total Traditional Grant Requests 317 CEF Administration	Category CCH - New Projects CCH - Capacity Building CCH Total Sport and Active Lifestyles Long Term Athlete Dev (LTAD) Sport Awareness Capacity Building Sport for Development/Inclusion Accessibility Active for Life Multi-Sport Hosting Sport and Active Lifestyles Total Total Traditional Grant Requests 7 CEF Administration 7 Sport and Active Lifestyles 7 5 7 5 6 7 6 7 8 8 8 Capacity Building 8 8 Sport for Development/Inclusion 4 Accessibility 6 Active for Life 12 Multi-Sport Hosting 2 Sport and Active Lifestyles Total 45 CEF Administration	Category CCH - New Projects CCH - Capacity Building CCH Total Sport and Active Lifestyles Long Term Athlete Dev (LTAD) Sport Awareness Capacity Building Sport for Development/Inclusion Accessibility Active for Life Multi-Sport Hosting Sport and Active Lifestyles Total Total Traditional Grant Requests (Total) (Total) (Total	Category Apps (Total) 202 CCH - New Projects 7 \$ CCH - Capacity Building 5 \$ CCH Total 67 \$ 567,700 \$ Sport and Active Lifestyles	Category Apps (Total) 2022 Requested CCH - New Projects 7 \$ 156,815 CCH - Capacity Building 5 60,288 CCH Total 67 \$ 567,700 \$ 1,181,223 Sport and Active Lifestyles Long Term Athlete Dev (LTAD) 7 \$ 51,575 Sport Awareness 6 \$ 44,565 Capacity Building 8 \$ 61,831 Sport for Development/Inclusion 4 \$ 27,450 Accessibility 6 \$ 50,019 Active for Life 12 \$ 84,974 Multi-Sport Hosting 2 \$ 51,500 Sport and Active Lifestyles Total 45 \$ 245,990 \$ 371,914 Total Traditional Grant Requests 317 \$ 6,038,340 \$ 9,858,419 CEF Administration 50,000	Category Apps (Total) 2022 Requested 20 CCH - New Projects 7 \$ 156,815 \$ CCH - Capacity Building 5 60,288 \$ CCH Total 67 \$ 567,700 \$ 1,181,223 \$ Sport and Active Lifestyles Long Term Athlete Dev (LTAD) 7 \$ 51,575 \$ Sport Awareness 6 \$ 44,565 \$ Capacity Building 8 \$ 61,831 \$ Sport for Development/Inclusion 4 \$ 27,450 \$ Accessibility 6 \$ 50,019 \$ Active for Life 12 \$ 84,974 \$ Multi-Sport Hosting 2 \$ 51,500 \$ Sport and Active Lifestyles Total 45 \$ 245,990 \$ 371,914 \$ Total Traditional Grant Requests 317 \$ 6,038,340 \$ 9,858,419 \$	Category Apps (Total) 2022 Requested 2022 Approved CCH - New Projects 7 \$ 156,815 \$ 49,500 CCH - Capacity Building 5 \$ 60,288 \$ 9,737 CCH Total 67 \$ 567,700 \$ 1,181,223 \$ 601,557 Sport and Active Lifestyles Long Term Athlete Dev (LTAD) 7 \$ 51,575 \$ 32,800 Sport Awareness 6 \$ 44,565 \$ 31,938 Capacity Building 8 \$ 61,831 \$ 37,816 Sport for Development/Inclusion 4 \$ 27,450 \$ 27,450 Accessibility 6 \$ 50,019 \$ 36,976 Active for Life 12 \$ 84,974 \$ 60,673 Multi-Sport Hosting 2 \$ 51,500 \$ 12,546 Sport and Active Lifestyles Total 45 \$ 245,990 \$ 371,914 \$ 240,199 Total Traditional Grant Requests 317 \$ 6,038,340 \$ 9,858,419 \$ 6,048,732 CEF Administration 50,000 50,000	Category Apps (Total) 2022 Requested 2022 Approved Budget vs Ap CCH - New Projects 7 \$ 156,815 \$ 49,500 CCH - Capacity Building 5 \$ 60,288 \$ 9,737 CCH Total 67 \$ 567,700 \$ 1,181,223 \$ 601,557 -\$33,857 Sport and Active Lifestyles Long Term Athlete Dev (LTAD) 7 \$ 51,575 \$ 32,800 Sport Awareness 6 \$ 44,565 \$ 31,938 Capacity Building 8 \$ 61,831 \$ 37,816 Sport for Development/Inclusion 4 \$ 27,450 \$ 27,450 Accessibility 6 \$ 50,019 \$ 36,976 Active for Life 12 \$ 84,974 \$ 60,673 Multi-Sport Hosting 2 \$ 51,500 \$ 12,546 Sport and Active Lifestyles Total 45 \$ 245,990 \$ 371,914 \$ 240,199 \$ 5,791 Total Traditional Grant Requests 317 \$ 6,038,340 \$ 9,858,419 \$ 6,048,732 -\$10,392 CEF Administration

					2022			2019 vs
				2019	Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	_		Budget	Approved
•					•			
CS-A1	Neighbour to Neighbour Centre	Neighbour to Neighbour Food Bank	Α	\$30,151	\$32,291	\$30,151	\$272,745	
CS-A2	Mission Services of Hamilton	Good Food Centre	Α	\$28,695	\$48,421	\$28,695	\$704,856	
CS-A3	Neighbour to Neighbour Centre	Home Delivery Program	Α	\$17,669				-
CS-A4	YWCA Hamilton	Transitional Living Program	Α	\$29,979	\$22,419	\$22,419	\$1,095,540	-\$7,560
CS-A5	Good Shepherd Centre Hamilton	Marketplace	Α	\$77,915				
CS-A6	Housing Help Centre - Hamilton & Area	Housing Stabilization	В	\$67,000				
CS-A7	Good Shepherd Centre Hamilton	Community Hot Meals	В	\$36,772	\$37,507	\$36,772	\$885,250	\$0
CS-A8	The Governing Council of the Salvation Army in Canada	Salvation Army Food Bank	В	\$23,627	\$51,510	\$23,627	\$171,700	\$0
	The Governing Council of the Salvation Army of Canada							
CS-A9	and Bermuda (Salvation Army Booth Centre)	The Salvation Army Street Ministry	В	\$26,590		\$26,590	\$128,823	\$0
	hungry Total			\$338,398				-\$7,560
CS-B1	Sexual Assault Centre (Hamilton and Area)	Abuse Prevention Program Diverse Communities Outreach	Α	\$6,565	\$6,997	\$6,565	\$131,694	\$0
CS-B2	Sexual Assault Centre (Hamilton and Area)	Program Phoenix Place VAW Residential	Α	\$11,951	\$12,739	\$11,951	\$151,198	\$0
CS-B3	YWCA Hamilton	Program	Α	\$15,000	\$15,000	\$15,000	\$155,788	\$0
CS-B4	Sexual Assault Centre (Hamilton and Area)	Crisis Support Program	Α	\$15,242	\$16,247	\$15,242	\$160,812	\$0
CS-B5	Sexual Assault Centre (Hamilton and Area)	Counselling and Advocacy Program Child and Youth Trauma Services	Α	\$20,155	\$21,483	\$20,155	\$248,555	\$0
CS-B6	Thrive Child and Youth Trauma Services	(CYTS)	Α	\$86,060	\$91,493	\$86,060	\$391,862	\$0
CS-B7	Good Shepherd Centre Hamilton	2nd Stage Housing	В	\$59,619	\$61,408	\$59,619	\$772,900	\$0
		Community Outreach, Counselling						
CS-B8	Interval House of Hamilton	and Telephone Crisis	В	\$25,240	\$26,502	\$25,240	\$1,044,077	\$0
CS-B9	Interval House of Hamilton	Women's Centre of Hamilton	В	\$47,014	\$50,303	\$47,014	\$362,285	
Everyone	feels safe Total			\$286,846	\$302,172	\$286,846		\$0
CS-C1	Immigrants Working Centre	IWC Childcare Program	Α	\$23,976	\$25,679	\$23,976	\$984,751	
CS-C2	Wesley Urban Ministries Inc. BGC Hamilton Halton (Hamilton East Kiwanis Boys & Girls	Children & Family Programs	В	\$43,872	\$44,750	\$43,872	\$219,200	\$0
CS-C3	·	Community Outreach Program	n	¢20.06E	\$40,500	¢30.06E	¢171 400	\$0
C3-C3	Club) BGC Hamilton Halton (Hamilton East Kiwanis Boys & Girls	•	В	\$39,065	\$40,500	\$39,065	\$171,400	\$0
CS-C4	Club)	Parent Outreach	В	\$51,664	\$52,000	\$51,664	\$175,000	\$0
CS-C5	Elliott Heights Baptist Church	Larch After School Program	В	\$5,202				
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					2022			2019 vs
				2019	_	2022 Funding		2022
REF#	Organization Full Name:	Program Name:	RATING		Requested		_	Approved
CS-C6	Living Rock Ministries	Wellness Works	В	\$33,428			\$125,450	\$0
CS-C7	Big Brothers Big Sisters of Halton & Hamilton	Matching Programs	В	\$24,480	\$25,200	\$24,480	\$345,000	\$0
CS-C8	Big Brothers Big Sisters of Halton & Hamilton	Group Mentoring Girls	В	\$23,548	\$25,200	\$23,548	\$85,000	\$0
CS-C9	Big Brothers Big Sisters of Halton & Hamilton	Group Mentoring Boys	В	\$23,086	\$25,200	\$23,086	\$96,000	\$0
Every chi	ld & family thrives Total			\$268,321	\$296,164	\$268,321		\$0
CS-D1	AY Alternatives for Youth Hamilton	Street Involved Outreach	Α	\$40,625	\$43,510	\$40,625	\$181,438	\$0
CS-D2	AY Alternatives for Youth Hamilton	AY Outreach	Α	\$26,347	\$28,218	\$26,347	\$142,639	\$0
CS-D3	Routes Youth Centre (Dundas Youth Chaplaincy)	Routes Youth Centre	Α	\$10,506	\$11,500	\$10,506	\$198,400	\$0
CS-D4	Wesley Urban Ministries Inc.	Youth Housing	Α	\$40,669	\$41,482	\$40,669	\$557,526	\$0
		Oasis Coffee House Evening						
CS-D5	Living Rock Ministries	Program	Α	\$15,801	\$37,982	\$15,801	\$126,608	\$0
CS-D6	Living Rock Ministries	It's a New Day Breakfast Program	Α	\$15,660	\$34,500	\$15,660	\$115,000	\$0
	is left behind Total	nes a men say sheamast megram	.,	\$149,608			¥ 110,000	\$0
CS-E1	Dundas Community Services	Services for Seniors	Α	\$45,016		\$45,016	\$328,393	\$0
00 11	January Controls	A.C.T.I.V.E at the Villa Adult Day	.,	Ψ .5,525	ψ .5,5 = .	Ψ .5,626	Ψ0_0,000	Ψ¢
CS-E2	St. Joseph's Villa	Program	Α	\$20,400	\$20,808	\$20,400	\$651,914	\$0
CS-E3	Wesley Urban Ministries Inc.	Seniors Outreach Program	Α	\$18,918		\$18,918	\$114,542	\$0
CS-E4	VON Hamilton (VON Canada - Ontario Branch)	Meals on Wheels	Α	\$56,852				, \$0
	,	Adult Day Program/Mobile Adult		. ,	. ,	. ,	. , ,	
CS-E5	VON Hamilton (VON Canada - Ontario Branch)	Day Services	Α	\$29,238	\$31,314	\$29,238	\$841,870	\$0
CS-E6	Good Shepherd Centre Hamilton	SAM Adult Day Program	Α	\$68,940	\$70,394	\$68,940	\$568,108	\$0
CS-E7	VON Hamilton (VON Canada - Ontario Branch)	Volunteer Visiting & Tele-Touch	Α	\$52,191	\$53,235	\$52,191	\$472,764	\$0
	Glanbrook Community Services (Glanbrook Home							
CS-E8	Support Program Inc)	Health & Fitness Program	Α	\$16,574	\$16,574	\$16,574	\$71,156	\$0
	Glanbrook Community Services (Glanbrook Home							
CS-E9	Support Program Inc)	Meal Supports Program	Α	\$23,962	\$23,962	\$23,962	\$287,941	\$0
	Glanbrook Community Services (Glanbrook Home	Volunteer Assisted transportation						
CS-E10	Support Program Inc)	Program (VAT)	Α	\$12,993	\$12,993	\$12,993	\$87,438	\$0
	Flamborough Connects (Flamborough Information and							
CS-E11	Community Services)	Seniors Support	Α	\$3,446	\$3,691	\$3,446	\$12,491	\$0
	Glanbrook Community Services (Glanbrook Home							
CS-E12	Support Program Inc)	Community Supports Program	Α	\$11,326	\$11,326	\$11,326	\$93,174	\$0
CS-E13	Ancaster Community Services	Assisted Volunteer Driving Program	В	\$9,417	\$9,605	\$9,417	\$48,495	\$0
CS-E14	Banyan Community Services Inc.	Grocer-Ease Program	В	\$19,145		\$19,145	\$272,935	\$0
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					2022			2019 vs
				2019	Funding	2022 Funding	Drogram	2019 VS 2022
DEE #	Organization Full Name	Duaguam Nama	DATING		Requested	•	Program	_
REF#	Organization Full Name:	Program Name:					Budget	Approved
CS-E15	Ancaster Community Services	Meals on Wheels	В	\$5,306		\$5,306		\$0
CS-E16	Ancaster Community Services	Frozen Meals	В	\$7,946	\$7,105	\$7,105	\$74,938	-\$841
		Seniors Intensive Case	_	4	4000	*** ===	40-40-0	4.5
CS-E17	Catholic Family Services of Hamilton The Governing Council of The Salvation Army Canada-	Management	В	\$11,768	\$26,459	\$11,768	\$851,878	\$0
CS-E18	Mountberry Adult Day Services	Reopening with resilience	В	\$6,200	\$6,300	\$6,200	\$693,012	\$0
	BGC Hamilton-Halton Adult Day Program (Hamilton East	BGC Hamilton-Halton Adult Day						
CS-E19	Kiwanis Boys and Girls Club)	Program	В	\$13,000	\$13,000	\$13,000	\$273,396	\$0
Everyone	can age in place Total			\$432,638	\$474,008	\$431,797		-\$841
		Lifelong Learning Opportunities and						
CS-F1	Adult Basic Education Association	Pathways	Α	\$8,500	\$10,000	\$8,500	\$88,840	\$0
CS-F2	Neighbour to Neighbour Centre	Middle East Outreach	Α	\$2,818	\$3,000	\$2,818	\$38,867	\$0
	Flamborough Connects (Flamborough Information and							
CS-F3	Community Services)	Community Outreach Services Ancaster Community Services-	Α	\$48,385	\$40,731	\$40,731	\$165,907	-\$7,654
CS-F4	Ancaster Community Services	Youth Engagement Program	Α	\$17,575	\$15,018	\$15,018	\$97,304	-\$2,557
	Hamilton Literacy Council (The Hamilton and District			. ,	. ,	. ,	. ,	. ,
CS-F5	Literacy Council)	Literacy and Basic Skills for Adults	Α	\$5,894	\$6,000	\$5,894	\$300,000	\$0
CS-F6	Ancaster Community Services	Community Outreach	В	\$35,991	\$37,700			
CS-F7	Dundas Community Services	Community Outreach	В	\$11,099	\$11,542		\$38,500	
CS-F8	Hamilton Council on Aging	Seniors Engagement	В	\$8,323		\$8,323		\$0
	3 3	3 3			. ,	. ,	. ,	·
CS-F9	Rotary Club of Hamilton	Rotary Literacy in Action Program	В	\$7,362	\$25,000	\$7,362	\$187,320	\$0
	•	Community Social Research and			. ,	. ,	. ,	·
CS-F10	Social Planning and Research Council of Hamilton	Planning	В	\$43,656	\$48,982	\$43,656	\$512,500	\$0
	grows Total			\$189,603		\$179,392		-\$10,211
	,	Evening Social Recreation		,	, ,-	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,
CS-G1	Canadian Mental Health Association, Hamilton	Rehabilitation Program	Α	\$24,995	\$26,727	\$24,995	\$111,075	\$0
	,			7-1,000	¥/	7-1,000	¥ ===,0 : 0	, ,
CS-G2	Catholic Family Services of Hamilton	Individual and Family Counselling	Α	\$39,901	\$58,209	\$39,901	\$249,725	\$0
CS-G3	Dundas Community Services	Counselling & Referral	В	\$7,600	\$7,752	\$7,600		\$0
Everyone	has someone to talk to Total	· ·		\$72,496				\$0
CS-H1	Sir Winston Churchill Secondary School	SWC Outfitters	DNQ	. ,	\$600		\$2,000	
	· · · · · · · · · · · · · · · · · · ·	Launch Affordable Supportive	~		, , , , ,		, ,	**
		Housing at the former Royal Oak	_				4=	4=====
CS-H2	Indwell Community Homes	Dairy	Α		\$75,000	\$56,250	\$594,575	\$56,250

					2022			2019 vs
				2019	Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	_	•	Budget	Approved
	a. Saminarion i an irramo.	Parent Education, Support and			quiostou	прристей	- maget	Пристои
CS-H3	AY Alternatives for Youth Hamilton	Skills Development Program	Α	\$18,162	\$14,303	\$14,303	\$73,622	-\$3,859
CS-H4	Immigrants Working Centre	IWC Employment Services	Α	. ,	\$27,850		\$396,011	
CS-H5	St. Matthew's House	Seniors in Kitchens (SinKs)	Α		\$40,000	\$30,000	\$674,100	
		Information and Peer Support for						
		Cancer Patients and						
CS-H6	Wellwood Resource Centre of Hamilton (Wellwood)	Families/Caregivers	Α	\$27,300	\$27,300	\$27,300	\$173,800	\$0
		Cancer Assistance Program –						
		Community Engagement in under-						
CS-H7	Cancer Assistance Program	resourced areas of Hamilton	Α	\$17,500	\$23,760	\$17,500	\$79,200	•
CS-H8	Mission Services of Hamilton	Youth Afterschool Meal Program	Α	\$27,587	\$35,000	\$27,587	\$129,385	
CS-H9	Mission Services of Hamilton	Willow's Place	Α	\$25,000	\$35,000	\$25,000	\$863,226	
CS-H10	Welcome Inn Community Centre	Food Access Program	Α	\$16,482	\$25,000	\$16,482	\$150,423	\$0
CS-H11	Thrive Child and Youth Trauma Services	OASIS	Α	\$41,700	\$30,222	\$30,222	\$181,032	-\$11,478
CS-H12	Disability Justice Network Of Ontario	Youth Action N2N Wellness and Mindful	Α		\$6,000	\$4,500	\$20,000	\$4,500
CS-H13	Neighbour to Neighbour Centre	Movement	Α		\$31,452	\$23,589	\$104,843	\$23,589
CS-H14	Neighbour to Neighbour Centre	N2N Food Skills For Kids Program N2N Intercultural Community	Α		\$31,689	\$23,767	\$105,633	\$23,767
CS-H15	Neighbour to Neighbour Centre	Kitchen	Α		\$18,979	\$14,234	\$63,265	\$14,234
CS-H16	Rygiel Supports for Community Living BGC Hamilton Halton (Hamilton East Kiwanis Boys & Girls	Senior Wellbeing project	Α		\$27,000	\$20,250	\$90,000	\$20,250
CS-H17	Club)	McQuesten BGC	Α		\$24,400	\$18,300	\$84,600	\$18,300
CS-H18	City Kidz Ministry	CityKidz Cares 2022	Α	\$0	\$19,685	\$14,764	\$367,100	\$14,764
CS-H19	Liberty For Youth	Bright Choices Program	Α		\$46,943	\$35,207	\$156,478	\$35,207
CS-H20	Neighbour to Neighbour Centre	Garden Skills Programming Helping Men Recover: 13-Week Program for Men With Lived Experience and their Family	Α		\$36,893			
CS-H21	Wayside House of Hamilton	Caregivers N2N Community Action and	Α	\$21,000	\$30,000	\$21,000	\$115,857	\$0
CS-H22	Neighbour to Neighbour Centre	Advocacy Program	Α		\$30,155	\$1,535	\$100,518	\$1,535

					2022		_	2019 vs
DEE #	Outside 5 HM	D N	DATING	2019	Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name: Increasing Access to STEM	KATING	allocation	Requested	Approved	Budget	Approved
		Education for Marginalized Children						
CS-H23	Scientists in School	in Hamilton	В		\$11,000		\$62,250	\$0
C3-1123	Scientists in School	N2N Community Meals and Good	ь		\$11,000		302,230	, ŞU
CS-H24	Neighbour to Neighbour Centre	Food Markets	В		\$59,322		\$197,742	\$0
CS-H25	Hamilton Jewish Family Services	HJFS Hamilton Kosher Food Bank	В		\$40,000		\$276,313	
CS-H26	Wesley Urban Ministries Inc.	Wesley Day Centre	В		\$160,000		\$540,588	
					+/		70.0,000	7-
CS-H27	Learning Disabilities Association of Halton-Hamilton	Mastering Mathematics	В		\$32,720		\$109,067	\$0
CS-H28	Food4Kids Hamilton	Weekends Without Hunger	В	\$9,542	\$50,000	\$9,542	\$877,500	\$0
		Hamilton Community Garden						
CS-H29	Neighbour to Neighbour Centre	Networking Program	В		\$20,991		\$69,970	\$0
	Parkview Church (Parkview Church of the Christian and							
CS-H30	Missionary Alliance)	Compassion Ministries	В		\$11,000		\$76,582	\$0
		Peer Support for Hamiltonians with						
CS-H31	Canadian National Institute for the Blind	Sight Loss	В		\$6,775		\$22,585	\$0
	JA South Western Ontario (Junior Achievement of South							
CS-H32	Western Ontario Inc)	Financial literacy programs	В		\$2,340		\$7,800	\$0
		Bereavement Supports for All						
		Types of Loss for Children and	_	400	4	4000	40	
CS-H33	Dr. Bob Kemp Hospice (Foundation Inc)	Families	В	\$37,500	\$45,000	\$37,500	\$211,505	\$0
CS-H34	Dady Draya	Body Brave Online Recovery	В		¢00.200		¢204 600	\$0
C3-H34	Body Brave	Support Program N2N Cooking Up Justice Youth	В		\$88,380		\$294,600	\$0
CS-H35	Neighbour to Neighbour Centre	Kitchen	В		\$18,979		\$63,265	\$0
C3-1133	Neighbour to Neighbour Centre	Ritchell	ь		\$10,575		303,203	, ŞU
CS-H36	Miskha Social Services	Sanad - Case Management Program	В		\$95,400		\$318,000	\$0
					1,		,,	, -
CS-H37	Sisters in Sync	Recovering You - Workshop Series	В		\$22,200		\$74,000	\$0
CS-H38	Essential Aid and Family Services of Ontario Inc.	Infant & Toddler Food Bank	В		\$25,000		\$335,000	\$0
CS-H39	Safe Families Hamilton/Halton	Safe Families Hamilton/Halton	D		\$35,925		\$119,750	\$0
CS-H40	Afghan Association of Hamilton	New Home - New Hope	D		\$6,300		\$21,000	
CS-H41	Ghana Association of Hamilton	Family Support Program	D		\$5,100		\$17,000	\$0
		CARING FOR OUR YOUTH						
CS-H42	PROGRAMME JEUNESSE ICI CORP.	PROGRAM	D		\$93,428		\$311,426	
CS-H43	Colombian Refugees Association	Housing aid	D		\$12,168	\$0	\$40,560	\$0

					2022			2019 vs
				2019	Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	Requested	Approved	Budget	Approved
CS-H44	Hamilton Helping Hands	Community Service Program	D		\$30,000	\$0	\$100,000	\$0
CS-H45	Somali Community In Hamilton	Community Services Program	D		\$15,000	\$0	\$50,000	\$0
CS-H46	The Children's Centre For Development	Monthly Webinar	D		\$3,600	\$0	\$12,000	\$0
Emerging	needs & program innovation Total			\$241,773	\$1,527,859	\$517,389		\$275,616
Total Com	munity Services			\$1,979,683	\$3,498,881	\$2,236,687		\$257,004

2022 City Enrichment Fund AGRICULTURE

Programs & Events

				2019	2022 5 dia -	D	2022 Freeding	2019 vs 2022
REF#	Organization Full Name:	Program Name:	PATING	allocation	2022 Funding Requested	Program Budget	2022 Funding Approved	Approved
AGR-A1		Ancaster Fair	A	\$26,000	\$28,000	\$660,630	\$26,000	\$0
	Ancaster Agricultural Society							
AGR-A2	Rockton Agricultural Society	Rockton World's Fair	A	\$27,139	\$35,000	\$645,000	\$27,139	\$0 \$0
AGR-A3	Binbrook Agricultural Society	Binbrook Fair 2022	Α	\$10,200	\$30,000	\$188,250	\$10,200	\$0
AGR-A4	Golden Horseshoe Beekeepers' Association ³	GHBA Public Education Program	Α	\$1,475	\$1,530	\$5,100	\$1,475	\$0
AGR-A5	Hamilton-Wentworth 4-H Association ³ Locke Street Farmers' Market (23027474 Ontario	Agriculture - 4-H Association	Α	\$6,000	\$5,500	\$18,500	\$5,500	-\$500
AGR-A6	Inc)	Community Programming Field of Dreams - Horses and Wellness	Α	\$1,950	\$2,100	\$7,000	\$1,950	\$0
AGR-A7	The Equestrian Association for the Disabled (TEAD)	Experience	Α		\$10,000	\$34,000	\$7,500	\$7,500
AGR-A8	Ancaster Farmers Market	Ancaster Farmers Market	В	\$3,000	\$5,000	\$29,921	\$3,000	\$0
AGR-A9	Hamilton Sustainable Victory Gardens Inc.	Agriculture	В	\$19,741	\$11,774	\$39,247	\$11,774	-\$7,967
	Hamilton Wentworth Soil and Crop Improvement	Improving Soil Health in Hamilton						
AGR-A10	Association ³	Agriculture	В	\$2,923	\$4,800	\$16,000	\$2,923	\$0
7.07.20		Southwentworth Plowmen's Association		4 2,323	ψ .,σσσ	410,000	ΨΞ/3Ξ3	Ψ°
AGR-A11	Southwentworth Plowmen's Association	Annual Plowing Match To beautify Ancaster and to educate on	В	\$1,428	\$2,100	\$7,000	\$1,428	\$0
AGR-A12	Ancaster Horticultural Society	horticultural topics	В	\$4,000	\$4,000	\$16,016	\$4,000	\$0
AGR-A12	Ancaster Horticultural Society	Agriculture general - Market in the Creek	В	\$4,000	\$4,000	\$10,010	\$4,000	Ş U
AGR-A13	Stoney Creek BIA	in Downtown Stoney Creek	В		\$5,000	\$39,600	\$2,500	\$2,500
	•	•						
AGR-A14	Westdale Village BIA	Casual Market	В		\$3,000	\$21,000	\$1,500	\$1,500
	Wentworth District Womens Institute ¹ (Federated		_			4		
AGR-A15	Women's Institute of Ontario)	Scholarship and Rose Program	В		\$5,000	\$17,000	\$2,500	\$2,500
Total Agric	ulture			\$103,856	\$152,804	\$1,744,264	\$109,389	\$5,533

¹ Final Report Pending

³ Owes funds to the City

REF#	Organization Full Name:	Program Name:	RATING	2019 allocation	2022 Funding Requested	2022 Funding Approved	Program Budget	2019 vs 2022 Approved
ARTS ART-A1	Supercrawl Productions	Supercrawl	Α	\$135,252	\$200,000	\$135,252	\$1,757,000	\$0
ART-A1	Art Gallery of Hamilton	Annual Operations	A	\$1,000,000	\$1,500,000	\$1,000,000	\$5,624,119	\$0 \$0
ART-A3	Hamilton Literary Festival Association	gritLIT Festival 2022	A	\$13,260	\$1,500,000	\$1,000,000	\$88,000	\$0
ART-A4	Dundas Pipes and Drums	Annual Operations	A	\$3,860	\$3,042	\$3,042	\$10,140	-\$818
ART-A5	Hamilton All Star Jazz Band Inc.	Hamilton All Star Jazz Bands Inc	A	\$9,500	\$9,500	\$9,500	\$53,405	\$0
ART-A6	Hamilton Children's Choir	Hamilton Children's Choir	A	\$52,265	\$55,000	\$52,265	\$520,093	\$0
AITTAU	Centre[3] for artistic and social practice (Centre[3] for		^	732,203	755,000	732,203	7320,033	γo
ART-A7	print and media arts)	Annual Operations	Α	\$53,581	\$80,000	\$53,581	\$1,231,200	\$0
		Hamilton Fringe Festival/ Frost Bites/ Artist						
ART-A8	Hamilton Festival Theatre Company	Development Programs (ALERT/SPARK)	Α	\$53,053	\$60,000	\$53,053	\$641,328	\$0
ART-A9	Brott Music Festival	Annual Operations	Α	\$182,800	\$225,000	\$182,800	\$1,670,400	\$0
ART-A10	Carnegie Gallery (Dundas Art and Craft Association)	Arts Operating	Α	\$15,000	\$20,000	\$15,000	\$420,600	\$0
	Hamilton Artists Inc.	Arts Operating	Α	\$58,140	\$75,000	\$58,140	\$317,357	\$0
		Hamilton Music Collective - Changing Lives Through Music - Empowering Change in the		. ,	. ,	. ,	. ,	·
Λ DT _Λ12	Hamilton Music Collective	Community	Α	\$63,648	\$100,000	\$63,648	\$614,975	\$0
ANT-A12	Hamilton Arts Council (Hamilton and Region Arts	Community	A	303,04 8	\$100,000	303,048	3014,373	ÇÜ
ART-A13	,	Hamilton Arts Council - Operating	Α	\$42,700	\$69,219	\$42,700	\$372,551	\$0
	Theatre Aquarius Inc.	Annual Operations	A	\$260,100	\$265,302	\$260,100	\$2,742,528	\$0 \$0
	Culture for Kids in the Arts	Arts Operating	A	\$23,644	\$30,000	\$23,644	\$400,000	\$0 \$0
	Bach Elgar Choir (Bach Elgar Choral Society)	Annual Operations	A	\$28,500	\$29,500	\$28,500	\$130,195	\$0 \$0
	The Harlequin Singers of Hamilton	Harlequin Singers 2022 Concert Series	A	\$3,850	\$3,850	\$3,850	\$21,000	\$0 \$0
	Dundas Concert Band Inc.	Dundas Concert Band	A	\$2,400	\$2,850	\$2,400	\$9,527	\$0
	Workers Arts and Heritage Centre Inc	Annual Operations	A	\$35,700	\$36,414	\$35,700	\$404,519	\$0
	Dundas Valley School of Art	DVSA Annual Operations	A	\$109,109	\$572,876	\$109,109	\$1,909,587	\$0
	Factory Media Centre	Annual Operations	Α	\$18,800	\$30,000	\$18,800	\$144,236	\$0
ART-A22	•	Newcomer Artists Mentorship Program	Α	\$19,000	\$21,000	\$19,000	\$70,000	\$0
	Hamilton Youth Steel Orchestra	HYSO	Α	\$10,098	\$15,826	\$10,098	\$52,755	\$0
,,,.20		14th Annual Telling Tales Festival and Year		¥10,030	Ψ13,020	Ψ20,030	ψο2,7.00	40
ART-A24	Telling Tales	Round Programming	Α	\$16,703	\$27,500	\$16,703	\$389,095	\$0
	Tune In Foundation	Annual Operations	Α	, ,,	\$23,500	\$17,625	\$78,383	\$17,625
		Arts Operating for Established Professional						
ART-A26	Hamilton Philharmonic Orchestra	Organizations Aeris Körper Contemporary Dance 2022	В	\$171,666	\$275,000	\$171,666	\$1,500,000	\$0
ART-A27	Aeris Körper Contemporary Dance HCA Dance Theatre (Hamilton Conservatory for the	Operations	В		\$29,000	\$14,500	\$251,400	\$14,500
ART-A28	` ,	Arts Operating	В	\$10,000	\$40,000	\$10,000	\$216,665	\$0

REF#	Organization Full Name:	Program Name:	RATING	2019 allocation	2022 Funding Requested	2022 Funding Approved	Program Budget	2019 vs 2022 Approved
ART-A29	Hamilton Academy of Performing Arts	Public Programming	В	\$20,000	\$30,000	\$20,000	\$191,935	\$0
ART-A30	Industry Performance Makers Arts Organization ¹	Annual Operations	В		\$29,925	\$14,963	\$115,845	\$14,963
ART-A31	Open Heart Arts Theatre	Open Heart Arts Theatre	В		\$27,474	\$13,737	\$91,580	\$13,737
ART-A32	The Duet Club of Hamilton	Holiday Concert, 2022	D		\$2,400	\$0	\$8,000	\$0
ART-A33	Musikay Chamber Ensemble	Musikay 2022-2023 season Annual Operations - Chamber Music	D		\$7,500	\$0	\$32,300	\$0
ART-A34	Chamber Music Hamilton ²	Hamilton - Arts Operating 2022	С	\$5,635	\$25,500	\$5,635	\$85,000	\$0
ART-A35	Westdale Cinema Group	Westdale Cinema Group	D		\$30,000	\$0	\$551,900	\$0
				\$2,418,264	\$3,968,178	\$2,478,271		\$60,007
FESTIVAL	S							
	Centre francophone Hamilton (Centre francais							
ART-B1	Hamilton Inc)	FrancoFEST 2022	Α	\$26,010	\$40,000	\$26,010	\$468,300	\$0
ART-B2	Festival of Friends (Hamilton-Wentworth)	Festival of Friends	Α	\$90,000	\$100,000	\$90,000	\$447,500	\$0
ART-B3	Greater Hamilton Arts And Events ¹	Arts Festivals - ArtsFest	D	\$25,000	\$25,000	\$0	\$200,000	-\$25,000
ART-B4	Greater Hamilton Arts And Events	Arts Festivals - OctoberWest	D		\$25,000	\$0	\$105,000	\$0
				\$141,010	\$190,000	\$116,010		-\$25,000
ARTS - CA	PACITY BUILDING							
		Hamilton Music Collective - Changing Lives Through Music - Empowering Change in the						
ART-C1	Hamilton Music Collective	Community	В		\$25,000	\$12,500	\$84,997	\$12,500
ART-C2	The Harlequin Singers of Hamilton	Harlequin Singers 2022 Concert Series	D		\$3,850	\$0	\$21,000	\$0
				\$0	\$28,850	\$12,500		\$12,500
CREATION	N & PRESENTATION							
ART-D1	Niv Shimshon	Creation & Presentation (Emerging)	Α		\$5,000	\$3,750	\$19,502	\$3,750
ART-D2	Alex Whorms	Emerging Artist Project	Α		\$5,000	\$3,750	\$25,000	\$3,750
ART-D3	Fiona Kinsella	Creation and Presentation for Arts	Α		\$10,000	\$7,500	\$35,000	\$7,500
ART-D4	Karen Ancheta	Arts-Creative Presentation "Worship in a Time of Plague" Collective	Α		\$10,000	\$7,500	\$37,000	\$7,500
	"Worship in a Time of Plague" Collective (Capella	(Capella Intima, Wolftone Media, Gallery						
ART-D5	Intima/Wolftone Media/Gallery Players of Niagara)	Players of Niagara)	Α		\$10,000	\$7,500	\$51,000	\$7,500
ART-D6	Sid Ryan Eilers (Lisa Emmons)	Kiss The Stormy Sky	Α		\$10,000	\$7,500	\$91,975	\$7,500
ART-D7	Nancy Anne McPhee	Textile installation series	Α		\$10,000	\$7,500	\$33,334	\$7,500
ART-D8	Exchange Rate Collective	Arts-Creative Presentation	Α		\$10,000	\$7,500	\$40,785	\$7,500
		the pack : a full-length, site-specific dance						
ART-D9	FREEWATER (Mikaela Demers)	show	В		\$10,000	\$5,000	\$47,134	\$5,000
ART-D10	Karen Logan Art	Creation and Presentation for Artists Azuline Duo - A New 19th Century Parlour	В		\$7,250	\$2,500	\$24,578	\$2,500
ART-D11	Azuline Duo (Sara Traficante)	Concert	В		\$4,400	\$2,200	\$14,825	\$2,200

					2022 Funding	2022 Funding	Program	2019 vs 2022
REF#	Organization Full Name:	Program Name:	RATING	2019 allocation	· ·	Approved	Budget	Approved
		Arts - Creation & Presentation, Emerging			•	•	0	
ART-D12	CODA FACTO (Alex DeRoo)	Arts	В		\$5,000	\$2,500	\$23,000	\$2,500
ART-D13	Nea Reid	Creation and Presentation	В		\$10,000	\$5,000	\$40,000	\$5,000
		Arts - Creation and Presentation Grants for						
ART-D14	Megan English Dance (Megan English)	Arts Professionals	В		\$10,000	\$5,000	\$43,200	\$5,000
ART-D15	Radha Menon	Death Cry of a Peacock novel	В		\$10,000	\$5,000	\$34,815	\$5,000
ART-D16	Art To Go Podcast (Cornelia Peckart)	Art To Go Podcast - Seven in the Summer	В		\$10,000	\$2,910	\$19,400	\$2,910
ART-D17	Luckystickz (Dejehan Hamilton)	"Discomfort" Album	В		\$7,719	\$3,860	\$25,730	\$3,860
ART-D18	Tracey-Mae Chambers	#hopeandhealingcanada	В		\$9,000	\$2,250	\$15,000	\$2,250
ART-D19	Trip Print Press (Nicholas Kennedy)	Established Artist Project	В		\$3,600	\$1,800	\$12,000	\$1,800
ART-D20	Urban Moorings Two	Urban Moorings Two	В		\$10,000	\$5,000	\$78,350	\$5,000
ART-D21	Chastity	Chastity - Established Artist Project	В		\$9,000	\$4,500	\$30,000	\$4,500
ART-D22	Ellis Songs (Linnea Williams)	Established Professional Artist Project	В		\$10,000	\$5,000	\$39,219	\$5,000
ART-D23	R.G.Wunderink Art (Rachelle Wunderink)	Creation & Presentation - Arts Program	В		\$5,000	\$2,273	\$15,150	\$2,273
ART-D24	HamiltonSeen	Shining Waters	В		\$10,000	\$5,000	\$40,000	\$5,000
ART-D25	Gary Barwin	Creation & Presentation	В		\$5,000	\$2,500	\$30,000	\$2,500
ART-D26	Reverend Marco D'Andrea ¹ (Emilio Marco D'Andrea)	Creation & Presentation (Established)	D		\$6,300	\$0	\$21,000	\$0
ART-D28	Morgan Wedderspoon	Established Artist Project	Withdrew	,	\$5,300	\$0	\$19,200	\$0
ART-D27	Tottering Biped Theatre Inc.	Annual Summer Shakespeare Project	DNQ		\$20,000	\$0	\$70,000	\$0
TOTAL AF	RTS			\$0 \$2,559,274	\$237,569 \$4,424,597	\$114,793 \$2,721,573		\$114,793 \$162,299

¹ Final Report Pending

² Addition Information Required

2022 City Enrichment Fund Environment

REF#	Organization Full Name:	Program Name:	RATING	2019	2022 Funding Requested	_	Program	2019 vs 2022 Approved
		Building Greenspace Stewardship						
ENV-A1	Hamilton-Wentworth Green Venture Sustainability Leadership (Sustainable	Capacity	Α		\$23,000	\$17,250	\$83,400	\$17,250
ENV-A2	Hamilton)	Business Development Initiative	В	\$0	\$25,000	\$12,500	\$136,200	\$12,500
Capacity E	Building Total			\$0	\$48,000	\$29,750		\$29,750
		NATURhoods: Helping Hamiltonians						
ENV-C1	Hamilton-Wentworth Green Venture	naturally adapt to urban runoff	Α	\$24,545	\$25,000	\$24,545	\$155,600	\$0
ENV-C2	Hamilton-Wentworth Green Venture	Experiential Environmental Learning	Α		\$25,000	\$18,750	\$85,650	\$18,750
ENV-C3	A Rocha Canada	Operation Wild	Α	\$10,000	\$35,000	\$10,000	\$122,000	\$0
	Bay Area Restoration Council (of Hamilton	School and Volunteer Programming for						
ENV-C4	and Halton Inc)	Hamilton Harbour Restoration	Α	\$14,382	\$35,000	\$14,382	\$175,150	\$0
	Sustainability Leadership (Sustainable	Water Management Framework for						
ENV-C5	Hamilton)	Business	Α		\$35,000	\$26,250	\$153,530	\$26,250
ENV-C6	Hamilton Naturalists Club	Wonderful Woodlands	Α		\$10,000	\$7,500	\$40,000	\$7,500
		Environment Hamilton Climate Action						
ENV-C7	Environment Hamilton Incorporated	Campaign	В		\$13,500	\$6,750	\$153,410	\$6,750
		Tree for Hamilton 2022 Tree Planting						
ENV-C8	Trees For Hamilton	Events	В	\$1,400	\$2,500	\$1,400	\$22,396	\$0
Projects 8	k Programs Total			\$50,327	\$181,000	\$109,577		\$59,250
Grand Tot	tal			\$50,327	\$229,000	\$139,327		\$89,000

2022 City Enrichment Fund Communities, Culture & Heritage

REF#	Organization Full Name:	Program Name:	RATING	2019 allocation	2022 Funding Requested	2022 Funding Approved	Program Budget	2019 vs 2022 Approved
Events &	-							
		Community, Culture, Heritage Large						
CCH-A1	Downtown Dundas BIA Downtown Hamilton Business Improvement	Events	Α		\$34,545	\$25,909	\$115,150	\$25,909
CCH-A2	Area	Gore Park Summer Promenade Imagine in the Park Children's Arts	Α	\$9,762	\$17,929	\$9,762	\$59,762	\$0
CCH-A3	Rotary Club of Hamilton AM	Festival	Α	\$5,100	\$6,000	\$5,100	\$36,300	\$0
CCH-A4	Locke Street Business Improvement Area	Sundays UnLocked	Α	\$0	\$13,500	\$10,125	\$48,000	\$10,125
CCH-A5	Barton Village Business Improvement Area	Barton Village Festival	Α	\$3,433	\$4,750	\$3,433	\$45,000	\$0
CCH-A6	Dundas Valley Orchestra	Activities and Concerts Core Programs: Salsa on the Waterfront	Α	\$5,100	\$5,000	\$5,000	\$36,030	-\$100
CCH-A7	SalsaSoul Productions	and SalsaSoul Sundays Ancaster Heritage Days 2022 Summer	Α	\$3,742	\$5,988	\$3,742	\$19,959	\$0
CCH-A8	Ancaster Heritage Days	Event CCH-Events & Est. Activities Large - HAL	Α	\$26,550	\$26,220	\$26,220	\$87,400	-\$330
CCH-A9	Hamilton Arts & Letters	Presents	Α	\$7,283	\$9,000	\$7,283	\$38,980	\$0
CCH-A10	Hamilton Sings! Community Choir Dundas Museum & Archives (Dundas Historical	Hamilton Sings! Community Choir Dundas Historical Society Museum -	Α		\$5,000	\$3,750	\$32,420	\$3,750
CCH-A11	Society Museum)	Exhibitions Program Communities, Culture & Heritage	Α	\$10,200	\$11,000	\$10,200	\$74,624	\$0
CCH-A12	Hamilton Folk Arts Heritage Council ³	Program	Α	\$58,905	\$54,287	\$54,287	\$210,000	-\$4,618
CCH-A13	Bet Nahrain Assyrian Heritage Centre South Asian Heritage Association of Hamilton	6th Annual Assyrian Festival of Nusardil	Α	\$1,196	\$4,994	\$1,196	\$16,645	\$0
CCH-A14	& Region ³	Spring Festival of South Asia	Α	\$5,250	\$9,175	\$5,250	\$37,250	\$0
CCH-A15	Lynden Canada Day Committee Waterdown's Oh Canada Ribfest (Rotary Club of	Artist fees	Α	\$7,500	\$7,500	\$7,500	\$40,000	\$0
CCH-A16	Waterdown)	Waterdown's Rotary Ribfest	Α	\$25,000	\$30,000	\$25,000	\$195,000	\$0
CCH-A17	Concession BIA	Concession Sidewalk Sounds 2022	Α	\$4,000	\$5,000	\$4,000	\$30,990	\$0
CCH-A18	Hamilton-Halton Chinese Choir	Concert & Established Activities	Α	\$1,400	\$3,100	\$1,400	\$8,600	\$0
CCH-A19	CACTUS FESTIVAL OF DUNDAS ONTARIO Comunita Racalmutese Maria SS Del Monte	DUNDAS CACTUS FESTIVAL	В	\$35,700	\$53,400	\$35,700	\$274,291	\$0
CCH-A20	Ontario Inc.	Communities, Culture & Heritage Ancaster Heritage Days 2022 Winter	В	\$6,000	\$12,488	\$6,000	\$99,802	\$0
CCH-A21	Ancaster Heritage Days	Event	В	\$1,995	\$2,685	\$1,995	\$8,950	\$0

2022 City Enrichment Fund Communities, Culture & Heritage

REF#	Organization Full Name:	Program Name:	RATING	2019 allocation	2022 Funding Requested	2022 Funding Approved	Program Budget	2019 vs 2022 Approved
	Sinfonia Ancaster (Ancaster Society for the			_	_	_		<u>-</u>
CCH-A22	Performing Arts)	Sinfonia Ancaster	В	\$8,231	\$11,081	\$8,231	\$36,935	\$0
CCH-A23	Dundas Cactus Parade Inc.	Dundas Cactus Parade	В	\$10,649	\$10,665	\$10,649	\$35,550	\$0
CCH-A24	Winona Peach Festival	Community, Culture & Heritage	В	\$86,700	\$98,000	\$86,700	\$355,600	\$0
CCH-A25	Zula Music And Arts Collective Hamilton	2022 Something Else! Festival	В	\$10,200	\$28,000	\$10,200	\$100,000	\$0
CCH-A26	Binbrook Parade Committee	Binbrook Santa Claus Parade	В	\$0	\$5,000	\$2,500	\$20,000	\$2,500
CCH-A27	Gourley Park Community Association	Winterfest/EasterEggHunt/Pumpkinfest Community, Culture, Heritage Large	В	\$2,765	\$5,355	\$2,765	\$12,600	\$0
CCH-A28	Downtown Dundas BIA	Events	В	\$28,886	\$34,153	\$28,886	\$113,842	\$0
CCH-A29	Hamilton and District Labour Council Asociacion Fraternidad Hispana (Fraternity	Celebrating Labour Day 2022 2022 Hispanic/Latin American Heritage	В	\$10,000	\$10,000	\$10,000	\$42,120	\$0
CCH-A30	Hispanic Association)	Month	В	\$3,000	\$3,500	\$3,000	\$13,250	\$0
CCH-A31	Durand Neighbourhood Association Inc.	Communities, Culture and Arts	В	\$1,378	\$1,575	\$1,378	\$5,250	\$0
CCH-A32	Living Rock Ministries	Arts of August Musicata-Hamilton's Voices concert	В	\$5,000	\$5,000	\$5,000	\$35,000	\$0
CCH-A33	Musicata-Hamilton's Voices (John Laing Singers)	series, 2021-22	В	\$3,000	\$9,000	\$3,000	\$30,000	\$0
CCH-A34	Hamilton You Poets	My City, My Voice	В		\$21,738	\$0	\$72,462	\$0
CCH-A35	Concession BIA	Concession Streetfest 2022 Community Events Established -	В	\$8,000	\$10,000	\$8,000	\$46,570	\$0
CCH-A36	Stoney Creek BIA ¹	Saturdays in the Creek	В	\$3,000	\$10,000	\$3,000	\$45,000	\$0
CCH-A37	Hamilton Black Film Festival	Hamilton Black Film Festival	В		\$29,500	\$0	\$99,500	\$0
CCH-A38	Westdale Village BIA Dundas Museum & Archives (Dundas Historical	Westdale Live!	В		\$5,000	\$0	\$28,000	\$0
CCH-A39	Society Museum)	Discover Your Historical Dundas	В	\$5,100	\$5,000	\$5,000	\$20,352	-\$100
	Festitalia Corporation ³	Festitalia 2022	В	\$18,750	\$25,000	\$18,750	\$170,700	\$0
	INDIA CANADA SOCIETY	GANDHI PEACE FESTIVAL	В	\$4,140	\$4,140	\$4,140	\$15,000	\$0
	Stoney Creek Santa Claus Parade Children's International Learning Centre	Santa Clause Parade	В	\$3,000	\$3,500	\$3,000	\$32,100	\$0
CCH-A43	(Hamilton)	Festivals of Light Educational Programme	В	\$0	\$12,000	\$0	\$53,860	\$0
	Chorus Hamilton	Chorus Hamilton's 2022 season CWH - Canada's Flying Museum is 50	В	\$5,000	\$5,000	\$5,000	\$38,660	\$0
CCH-A45	Canadian Warplane Heritage	years old	D		\$146,187	\$0	\$462,300	\$0
CCH-A46	Sustainability Leadership (Sustainable Hamilton)	Signature Event Series	D		\$25,000	\$0	\$116,415	\$0

2022 City Enrichment Fund Communities, Culture & Heritage

				2019	2022 Funding	2022 Funding	Program	2019 vs 2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	~	Approved	Budget	Approved
CCH-A47	Ottawa Street Business Improvement Area	2022 Sidewalk Sale	D		\$3,600	\$0	\$10,779	\$0
CCH-A48	Ottawa Street Business Improvement Area	Holiday Cheer 2022 New links between Seniors –Juniors	D		\$3,600	\$0	\$9,800	\$0
CCH-A49	iBalance Living Association	under the Covid-Crisis	D		\$5,000	\$0	\$9,423	\$0
CCH-A50	Flamborough Santa Claus Parade ²	FSCP	С	\$15,000	\$15,000	\$15,000	\$60,000	\$0
		Waterfront Tours - Hamilton Waterfront Trolley and Hamiltonian Tour Boat-						
CCH-A51	Hamilton Waterfront Trust ²	Sightseeing Tours by Land & Water	С	\$5,000	\$30,000	\$5,000	\$120,000	\$0
CCH-A52	Polish Symfonia Choir ²	Christmas Carols Concert	С	\$4,038	\$4,467	\$4,038	\$14,890	\$0
CCH-A53	Hamilton Santa Claus Parade Committee ^{2,3}	Hamilton Santa Claus Parade	С	\$46,231 \$50,000		\$46,231	\$90,280	\$0
CCH-A54	African Caribbean Cultural Potpourri Inc (ACCPI) The Gasworks (The John and Ellie Voortman	ACCPI Scholarship Awards Program	DNQ		\$6,000		\$24,000	\$0
CCH-A55	Charitable Foundation)	Porch Concerts at The Gasworks	DNQ		\$1,500		\$5,000	\$0
				\$505,184	\$964,120	\$542,320		\$37,136
New Proj								
CCH-B1	Pride Hamilton ¹	Pride Hamilton 2022	Α	\$7,650	\$46,050	\$26,250	\$153,500	\$18,600
CCH-B2	Red Betty Theatre	Rukmini's Gold Production	Α		\$31,000	\$23,250	\$116,830	\$23,250
CCH-B3	Zula Music And Arts Collective Hamilton	2022 Watch it Burn! Series Communities, Culture And Heritage:	В		\$30,000	\$0	\$100,000	\$0
CCH-B4	Canadian Society of Contemporary Iron Arts	New Projects	В		\$2,000	\$0	\$10,000	\$0
CCH-B5	Ghana Association of Hamilton	Ghanaian Cultural Fiesta #nomoreantisemitism international	В		\$2,165	\$0	\$6,807	\$0
CCH-B6	hamilton jewish federation	conference	D		\$45,000	\$0	\$154,500	\$0
CCH-B7	Sir John A. Macdonald Society	Canada's Birthday Celebration	D		\$600	\$0	\$2,000	\$0
				\$7 <i>,</i> 650	\$156,815	\$49,500		\$41,850
Capacity	•							
CCH-C1	Zula Music And Arts Collective Hamilton	Zula Reconstruction	Α		\$2,460	\$1,845	\$8,200	\$1,845
CCH-C2	Women's Art Association of Hamilton	Capacity Building for Arts Organizations	D		\$7,600	\$0	\$26,200	\$0
CCH-C3	BLK OWNED Ltd	Black Youth Entrepreneurship Hub The Jazz Connection Big Band 2022/23	DNQ		\$30,000		\$156,576	\$0
CCH-C4	Jazz Connection Big Band	Season	DNQ		\$6,000		\$20,000	\$0

Communities, Culture & Heritage

								2019 vs
				2019	2022 Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	Requested	Approved	Budget	Approved
CCH-C5	Ottawa Street Business Improvement Area	Sew Hungry 2022	DNQ	\$7,892	\$14,228	\$7,892	\$47,426	\$0
				\$7,892	\$60,288	\$9,737		\$1,845
TOTAL C	ommunities, Culture & Heritage (CCH)			\$520,726	\$1,181,223	\$601,557		\$80,831

¹ Final Report Pending

² Addition Information Required

³ Owes funds to the City

2022 City Enrichment Fund Sports & Active Lifestyles

					2022			2019 vs
				2019	Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	Requested	Approved	•	Approved
		GrassRoots Training Program - Revitalizing			•		0	•
SAL-A1	Saltfleet Stoney Creek Soccer Club	after the Pandemic	Α	\$3,825	\$10,000	\$3,825	\$350,000	\$0
SAL-A2	Flamborough Dundas Soccer Club	FDSC followsLTPD for Grassroots Soccer	Α	\$3,902	\$7,680	\$3,902	\$35,000	\$0
		Hamilton Soccer - GrassRoots Soccer -						
SAL-A3	The Hamilton and District Soccer Association ¹	Retention of Program Initiatives	Α	\$7,500	\$10,000	\$7,500	\$65,000	\$0
SAL-A4	Hamilton Ringette Association 1	FUN 1 FUN2 FUN3	Α		\$7,500	\$5,625	\$33,950	\$5,625
SAL-A5	Friends of Bishop Ryan	Wrestling Development Program	Α		\$7,500	\$5,625	\$28,750	\$5,625
	Hamilton Aquatic Club (Hamilton-Wentworth							
SAL-A6	Aquatic Club)	Swimmer Support Program	Α		\$7,500	\$5,625	\$49,922	\$5,625
		Long-Term Athlete Development Planning and						
SAL-A7	Hamilton Aquatic Water Polo Club	Implementation	В		\$1,395	\$698	\$4,650	
_	m Athlete Development Total			\$15,227	\$51,575	\$32,800		\$17,573
SAL-B1	Flamborough Dundas Soccer Club	New Club Awareness	Α	\$7,491	\$5,400	\$5,400	\$18,000	-\$2,091
641.50		Hamilton Olympic Club - Sport Awareness			47.500	Å5.625	464.400	ÅF 625
SAL-B2	Hamilton Olympic Club	Program	Α		\$7,500	\$5,625	\$64,123	\$5,625
SAL-B3	Saltfloot Stangy Crook Soccor Club	SSC - Advanced Development Program - Re-	Α	\$5,355	\$10,000	\$5,355	\$200,000	\$0
SAL-DS	Saltfleet Stoney Creek Soccer Club	Building the Pathway SportHamilton Community Communication	A	\$3,333	\$10,000	\$5,555	\$200,000	Ş U
SAL-B4	SportHamilton	strategy project	Α		\$8,550	\$5,625	\$28,500	\$5,625
3/ LE D-1	Hamilton Aquatic Club (Hamilton-Wentworth	strategy project	^		70,330	73,023	720,300	73,023
SAL-B5	Aquatic Club)	HAC Sport Promotion Program	Α		\$5,615	\$4,211	\$18,719	\$4,211
		Hamilton Soccer - Continued Enhancement of			7-7	+ -,===	7-5/: -5	+ -/
SAL-B6	The Hamilton and District Soccer Association 1	the Match Official Mentorship	Α	\$5,722	\$7,500	\$5,722	\$36,000	\$0
-	vareness Total			\$18,568	\$44,565	\$31,938	700,000	\$13,370
•	The Equestrian Association for the Disabled			. ,	. ,	. ,		. ,
SAL-C1	(TEAD)	Trotting into the Future	Α		\$6,500	\$4,875	\$36,350	\$4,875
SAL-C2	Flamborough Dundas Soccer Club	FDSC Builds Capacity	Α	\$7,500	\$7,680	\$7,500	\$25,600	\$0
SAL-C3	Hamilton Hornets Rugby Football Club	Hornets Sustainability Program	Α	\$7,500	\$7,500	\$7,500	\$25,700	\$0
		2022 NCCH Building the Support Team for						
SAL-C4	National Cycling Centre-Hamilton	Riders/Cyclists	Α		\$5,831	\$4,373	\$19,436	\$4,373
		Monte Cristo Track Club - Capacity Building						
SAL-C5	Monte Cristo Track Club	Project	Α		\$7,200	\$5,400	\$24,000	\$5,400
		Golden Horseshoe Track & Field Council -		40.000	4	4		4.0
SAL-C6	Golden Horseshoe Track & Field Council	Capacity Building Program	Α	\$2,250	\$16,230	\$2,250	\$54,103	\$0
CAL CZ	Hamilton Amustic Motor Bala Club	Capacity building/Succession	Α.		¢4.000	64 440	¢c 200	Ć4 440
SAL-C7 SAL-C8	Hamilton Aquatic Water Polo Club	Planning/Professional Development	A B		\$1,890	\$1,418 \$4,500	\$6,300	\$1,418 \$4,500
SAL-C8	Saltfleet Stoney Creek Soccer Club	SSC - Sports Rebuilding After COVID	В		\$9,000	\$4,500	\$30,000	\$4,500

2022 City Enrichment Fund Sports & Active Lifestyles

					2022			2019 vs
				2019	Funding	2022 Funding	Program	2022
REF#	Organization Full Name:	Program Name:	RATING	allocation	Requested	Approved	Budget	Approved
Capacity	Building Total			\$17,250	\$61,831	\$37,816		\$20,566
	-	Dragon Boat Sport Development and Wellness						
SAL-D1	Knot A Breast	Program	Α	\$7,500	\$7,500	\$7,500	\$26,375	\$0
SAL-D2	Wesley Urban Ministries Inc.	Youth Centre at Beasley	Α	\$7,500	\$7,500	\$7,500	\$27,500	\$0
	BGC Hamilton-Halton (Hamilton East Kiwanis							
SAL-D3	Boys and Girls Club)	Midnight Basketball	Α	\$7,500	\$7,500	\$7,500	\$72,500	\$0
	Binbrook Minor Baseball Association (8746974							
SAL-D4	Canada Association)	Rally Cap	В	\$5,414	\$4,950	\$4,950	\$16,500	-\$464
Sport De	velopment Total			\$27,914	\$27,450	\$27,450		-\$464
	The Equestrian Association for the Disabled							
SAL-E1	(T.E.A.D.)	Subsidies	Α	\$7,500	\$7,142	\$7,142	\$23,807	-\$358
	Royal Hamilton Yacht Club (Established 1888							
SAL-E2	Inc)	RHYC Able Sail	Α	\$6,120	\$7,447	\$6,120	\$24,823	
SAL-E3	Saltfleet Stoney Creek Soccer Club	SSC - Special Needs & All Abilities Program	Α		\$7,500	\$5,625	\$35,000	
SAL-E4	Flamborough Dundas Soccer Club BGC Hamilton-Halton (Hamilton East Kiwanis	FDSC Special Soccer	Α	\$6,900	\$8,880	\$6,900	\$29,600	\$0
SAL-E5	Boys and Girls Club)	BGC Hamilton-Halton HAVES	Α	\$5,414	\$7,500	\$5,414	\$32,500	\$0
	Hamilton Aquatic Club (Hamilton-Wentworth	Jimmy Thompson Swimmer Participation		. ,	. ,	. ,	. ,	•
SAL-E6	Aquatic Club)	Program	В		\$11,550	\$5,775	\$38,500	\$5,775
Accessibi	ility Total			\$25,934	\$50,019	\$36,976		\$11,042
SAL-F1	Fit Active Beautiful Foundation (FAB)	2022 FAB Girls 5K Challenge Program	Α	\$7,500	\$7,500	\$7,500	\$69,041	\$0
SAL-F2	Flamborough Dundas Soccer Club	FDSC Soccer for Life	Α	\$4,500	\$7,680	\$4,500	\$27,000	\$0
		New Hope Community Bikes Youth Cycling						
SAL-F3	New Hope Community Bikes	Program	Α		\$7,500	\$5,625	\$25,493	\$5,625
SAL-F4	Hamilton Hornets Rugby Football Club	Rugby for Newcomers and At-Risk Youth	Α	\$5,462	\$7,500	\$5,462	\$28,225	\$0
	BGC Hamilton-Halton (Hamilton East Kiwanis							
SAL-F5	Boys and Girls Club)	Let's Get Moving	Α		\$7,500	\$5,625	\$407,500	\$5,625
	The Equestrian Association for the Disabled	Equine-Assisted Learning Facilitator						
SAL-F6	(T.E.A.D.)	Certification	Α		\$6,260	\$4,695	\$43,328	\$4,695
SAL-F7	Hamilton Chinese Sports Association	Go to Play	Α	\$2,283	\$4,527	\$2,283	\$15,090	\$0
		Hamilton Olympic Club - Active for Life						
SAL-F8	Hamilton Olympic Club	Program	Α		\$7,500	\$5,625	\$64,123	
SAL-F9	Hamilton Aquatic Water Polo Club	Swim & Play Ball program	Α		\$5,400	\$4,050	\$30,000	
SAL-F10	Living Rock Ministries	Rock-in-Action	Α	\$4,058	\$8,607	\$4,058	\$28,690	
SAL-F11	Hamilton Bay Sailing Club The Croatian Sports and Community Centre of	Sports and Active Lifestyle-Active for Life	В	\$7,500	\$7,500	\$7,500	\$43,482	\$0
SAL-F12	Hamilton	Expanding sports offerings for youth and adults	В		\$7,500	\$3,750	\$25,000	\$3,750

2022 City Enrichment Fund Sports & Active Lifestyles

REF#	Organization Full Name:	Program Name:	RATING	2019 allocation	2022 Funding Requested	2022 Funding Approved	Program	2019 vs 2022 Approved
Active to	r Life Total			\$31,303	\$84,974	\$60,673		\$29,370
SAL-G1	91st Highlanders Track and Field Association	Hamilton Indoor Games	Withdrew	\$23,535	\$31,500	\$0	\$105,000	-\$23,535
SAL-G2	Ontario Cycling Association	Paris to Ancaster Bicycle Race	Α	\$12,546	\$20,000	\$12,546	\$225,000	\$0
Multi-Sp	ort Total			\$36,081	\$51,500	\$12,546		-\$23,535
Grand To	otal			\$172.277	\$371.914	\$240.199		\$67.922

¹ Final Report Pending

City Enrichment Fund - Payment Plan

Upon Council approval and the receipt of the signed City Enrichment Fund Agreement, the following payment plan will apply:

\$0 - \$10,000	paid out 100% upon Council Approval
\$10,001 - \$100,000	paid 80% on Council Approval; 20% released November 1, 2022
Over \$100,000	paid monthly

City Enrichment Fund Agreements which are not completed and returned by November 1, 2022 will result in the grant being forfeited.

In the case where a successful grant applicant has outstanding arrears with the City of Hamilton as of December 31, 2021, the grant will first be applied against the outstanding arrears, with the remainder to be paid to the organization, in accordance with the City Enrichment Fund payment plan.



EMERGENCY & COMMUNITY SERVICES COMMITTEE REPORT 22-008

1:30 p.m.
Thursday, May 19, 2022
Council Chambers
Hamilton City Hall
71 Main Street West

Present:

Regrets:

Councillors B. Clark (Chair), S. Merulla, N. Nann, and E. Pauls

THE EMERGENCY & COMMUNITY SERVICES COMMITTEE PRESENTS REPORT 22-008 AND RESPECTFULLY RECOMMENDS:

Councillors T. Jackson and T. Whitehead – Personal

1. Children's Services and Neighbourhood Development Divisional Name Change (HSC22026) (City Wide) (Item 7.1)

That the Children's Services and Neighbourhood Development Division in the Healthy and Safe Communities Department be renamed the Children's and Community Services Division.

- 2. Hamilton Paramedic Service Master Plan 2022-2031 (HSC22012) (City Wide) (Item 8.1)
 - (a) That the Hamilton Paramedic Master Plan (2022–2031) attached as Appendix "A" to Emergency and Community Services Committee Report 22-008 be adopted as a strategic framework to guide operational, capital, and organizational decisions related to the delivery of paramedic services; and.
 - (b) That staff be directed to submit capital and/or operating budget requirements to support the Hamilton Paramedic Service Master Plan (2022-2031) to the appropriate budget process(es) for consideration as required.

3. Occupational Health Exposure Program Service Provider (CES15027(a)) (City Wide) (Item 10.1)

- (a) That, the Occupational Health and Exposure Program established in December of 1997 be extended for a further 25 years to 2047;
- (b) That Council approve the single source procurement, pursuant to Procurement Policy #11 Non-competitive Procurements, for occupational health and exposure screening services with Occupational Health Care-A-Van Inc. for a 5-year term ending November 30, 2027; and,
- (c) That the General Manager, Healthy and Safe Communities Department or their designate be authorized and directed to negotiate and execute an extension to the Contract and any ancillary documents required to give effect thereto in a form satisfactory to the City Solicitor.
- 4. 2021 Point in Time Connection Results (HSC22021) (City Wide) (Item 10.2)

That Report HSC22021, respecting 2021 Point in Time Connection Results, be received.

5. Citizen Committee Report - Seniors Advisory Committee - Seniors Advisory Committee Revised Brochure (Added Item 10.3)

That the content and design of the revised Seniors Advisory Committee brochure entitled "Seniors Advisory Committee (SAC)," attached as Appendix "B" to Emergency and Community Services Committee Report 22-008, be approved.

6. Obligations and Responsibilities Associated with Duty of Care (Added Item 13.1)

That Legal staff report back to the Emergency and Community Services Committee with an information report describing Hamilton Paramedic Service's obligations and responsibilities associated with duty of care.

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

The Committee Clerk advised the following changes to the agenda:

5. COMMUNICATIONS

5.1. Zoe Kazakos, respecting Current Living Conditions at the Cathedral Women's Shelters

Recommendation: To be received.

10. DISCUSSION ITEMS

 Citizen Committee Report - Seniors Advisory Committee - Seniors Advisory Committee Revised Brochure

The agenda for the May 19, 2022 Emergency and Community Services Committee meeting, was approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

There were no declarations of interest.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)

The Minutes of the May 5, 2022 meeting of the Emergency and Community Services Committee, were approved, as presented.

(d) COMMUNICATIONS (Item 5)

(i) Zoe Kazakos, respecting Current Living Conditions at the Cathedral Women's Shelters (Added Item 5.1)

The correspondence from Zoe Kazakos, respecting Current Living Conditions at the Cathedral Women's Shelters, was received and referred to staff for response.

(e) CONSENT ITEMS (Item 7)

(i) Seniors Advisory Committee Minutes – April 1, 2022 (Item 7.2)

The Seniors Advisory Committee Minutes of April 1, 2022, were received.

(f) STAFF PRESENTATIONS (Item 8)

(i) Hamilton Paramedic Service Master Plan 2022-2031 (HSC22012) (City Wide) (Item 8.1)

Chief Michael Sanderson, Hamilton Paramedic Service, addressed the Committee, respecting Hamilton Paramedic Service Master Plan 2022-2031, with the aid of a presentation.

The presentation from Chief Michael Sanderson, Hamilton Paramedic Service, respecting Hamilton Paramedic Service Master Plan 2022-2031, was received.

For further disposition of this matter, refer to Items 2, 6 and (g)(i).

(g) GENERAL INFORMATION / OTHER BUSINESS (Item 13)

(i) Obligations and Responsibilities Associated with Duty of Care (Added Item 13.1)

Committee discussed Hamilton Paramedic Service's duty of care and requested further information.

For further disposition of this matter, refer to Items 2, 6 and (f)(i).

(h) ADJOURNMENT (Item 15)

There being no further business, the Emergency and Community Services Committee, was adjourned at 3:20 p.m.

Respectfully submitted,

Councillor B. Clark Chair, Emergency and Community Services Committee

Tamara Bates Legislative Coordinator Office of the City Clerk





PARAMEDIC SERVICE 2022 MASTER PLAN 2031



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MESSAGE :::: EROM THE CHIEF

The Hamilton Paramedic Service (HPS) is proud to serve Hamilton's residents and those who come to our city to work and visit. The people of HPS are dedicated to the profession and to ensuring that Hamilton is a healthy and safe community.

To assist us in our endeavour to continue to provide timely, effective quality care in an ever-changing environment that meets the complex and diverse needs of all the people we serve, we need to set a course that is transformative.

This Master Plan lays the groundwork to transform Hamilton's land ambulance service over the next ten years. Through technology advancements, innovation and optimizing resources and processes, this Master Plan seeks to alter the way HPS delivers service to better meet the needs of the community, now and into the future.

The Hamilton Paramedic Service Master Plan (2022-2031) analyzes the current state of service delivery in Hamilton including response data and the unique characteristics of the city's profile that impact land ambulance services. This Master Plan also forecasts the future state of service delivery based on predicted increases in demand on services and the growing and changing needs of the community. Barriers to the delivery of services currently experienced by HPS and challenges expected in the coming years are reported. In addition, ways to optimize and transform systems to enhance service delivery and improve patient outcomes are discussed. The Master Plan serves as a map with which to navigate challenges and capitalize on opportunities we face currently as well as in the years ahead.

The community and city leaders trust and depend on HPS. We do not take that for granted and sincerely appreciate their ongoing support. This Master Plan will help us continue to provide the quality of care and level of service the community has come to expect and deserves. It is a plan that puts the needs of people in Hamilton at the forefront. Despite the changes and challenges we face we will persist in doing what is right for the health and well-being of those in our community. We are fortunate to be in a city with some of the best health care and social services in the province and we will continue to work with our community partners to enhance an integrated system of support. This Master Plan will ensure we do that in an efficient, fiscally responsible manner.

Michael Sanderson, Chief Hamilton Paramedic Service

EXECUTIVE SUMMARY

This Master Plan provides direction for the Hamilton Paramedic Service (HPS) for the next ten years. It is a Plan that is transformational. Through technology advancements, innovation, resource allocation and optimization of operations, this Plan lays the groundwork for transforming how HPS conducts its business. The type of work HPS performs and how the work is carried out must evolve to meet the growing and diverse needs of the community. This Plan sets the course for more integrated services delivered by paramedics equipped with progressive technology and expanded skills to ensure the best outcomes for all people who depend on HPS for their health and well-being.

The HPS Master Plan is built on five overarching priorities:

- Operational Integration
- Infrastructure Progression
- Service Delivery Optimization

- Positive Work Culture Elevation
- Healthy and Safe Communities
 Protection and Promotion

A series of objectives are identified for each priority. These objectives are categorized as follows:

- Increase response resources
- Modernize dispatch
- Centralize logistics for City of Hamilton health care divisions
- Integrate patient records
- Enhance logistics and planning functioning
- Review and develop facilities
- Advance IT
- Enhance deployment
- Reduce offload delays
- Increase cultural competency

- Increase use of virtual platforms in patient care
- Advance a just and safe culture
- Develop a people-focused plan for personnel
- Expand, centralize, and sustain Mobile Integrated Health (MIH)
- Broaden the scope of clinical practice
- Add specialized services
- Plan for contingency response
- Reduce carbon footprint

HPS Master Plan Priorities and Categories of Objectives

			2022 2031	
Operational Integration	Infrastructure Progression	Service Delivery Optimization	Positive Work Culture Elevation	Healthy & Safe Communities Protection and Promotion
Modernized Dispatch	Adequate Response Resources	Enhanced Deployment	Just and Safe Culture	Expanded, Centralized and Sustained MIH
Centralized Logistics Integrated Patient Records	Enhanced Logistics Sufficient Facilities Advanced IT	Reduced Offload Delays Increased Cultural Compentency Increased Virtual Care	People-Focused Culture	Broadened Scope of Practice Specialized Services Contingency Response Preparedness Reduced Carbon Footprint

This Master Plan will transform HPS to ensure it is well-prepared to meet evolving community needs in increasingly complex times, but also to be a leader in delivering innovative, patient-centred quality care. It will provide the HPS workforce with a positive workplace culture and the tools required for optimal performance. HPS knows that paramedics who are cared for are better able to care for patients. This Master Plan will also focus on serving the community in an inclusive, environmentally conscious, and fiscally responsible manner.

THE HAMILTON PARAMEDIC SERVICE 10-YEAR MASTER PLAN LAYS THE GROUNDWORK FOR TRANSFORMATIONAL CHANGE.

THROUGH TECHNOLOGY
ADVANCEMENTS, INNOVATION,
RESOURCE ALLOCATION AND
OPTIMIZATION OF OPERATIONS,
THIS MASTER PLAN ADDRESSES
THE GROWING AND DIVERSE
NEEDS OF HAMILTON'S
COMMUNITIES NOW AND
INTO THE FUTURE.



INTRODUCTION

The Hamilton Paramedic Service (HPS) is the designated sole provider of paramedic services for the City of Hamilton since 2000, following the downloading of this responsibility from the provincial government to local municipalities.

HPS provides emergency response pre-hospital advanced medical and trauma care, in addition to transporting patients to appropriate health care facilities. HPS also undertakes demand mitigation activities including community paramedic activities, public education, health care and safety promotion and risk prevention activities in neighbourhoods and public facilities including provision and maintenance of public access defibrillators across the city. As well, with community partners, HPS responds to health care crises in the community such as the opioid crisis and the COVID-19 pandemic.



As mandated by the *Ambulance Act*, R.S.O. 1990, c. A.19, and overseen by the Ministry of Health (MOH), the City of Hamilton is responsible for "ensuring the proper provision of land ambulance services in the municipality in accordance with the needs of persons in the municipality." Specifically, the municipality is responsible to:

- a) select persons to provide land ambulance services in the municipality in accordance with the Act;
- b) enter into such agreements as are necessary to ensure the proper management, operation and use of land ambulance services by operators; and
- ensure the supply of vehicles, equipment, services, information, and any other thing necessary for the proper provision of land ambulance services in the municipality in accordance with this Act and the regulations.

The *Ambulance Act* directs municipalities to select persons to operate the land ambulance services via a request for proposals issued by the municipality to provide land ambulance services directly.

The City of Hamilton has assumed direct delivery of land ambulance services for the city since January 1, 2000. Because this responsibility was downloaded, the provincial government provides 50% funding to the City of Hamilton for paramedic services, while the remaining 50% comes from the local tax levy.

In the 2017 Capital Budget Report, Hamilton's City Council approved the development of a plan to guide the delivery of paramedic services over the next ten years.



1.1 City of Hamilton Strategic Plan (2016-2025)

HPS is driven by the City of Hamilton's Strategic Plan aimed at achieving the City's Vision "to be the best place to raise a child and age successfully." Specifically, HPS supports the following priorities within the City's Strategic Plan:

PRIORITY: Community Engagement and Participation

To enhance the wellness of the community, HPS has initiated a variety of engagement opportunities including fundraising events such as toy drives, food drives, clothing drives and supporting local businesses in raising funds for their charities; awareness-raising campaigns for health issues including autism, cystic fibrosis, breast and prostate cancers and mental health; educational events consisting of school visits, participating in parades, fairs and festivals as well as being active on social medial. Furthermore, HPS continually seeks feedback about services provided through a range of satisfaction surveys available to patients and residents.

PRIORITY: Economic Prosperity and Growth

HPS contributes to a prosperous local economy as paramedic services are a key component of the health care system enhancing quality of care including emergency medical care and in-home care through community paramedicine. A community that has access to robust health care services has a population that is healthier and more economically productive. Moreover, quality health care attracts and retains people, their skills, entrepreneurship and earning potential to contribute to the economic growth of the city. In addition to ensuring quality of care is provided to all residents who require paramedics services, the Master Plan seeks to develop a proactive approach to generating revenue through contractual services such as supporting the film and sports industries.

PRIORITY: Culture and Diversity

HPS values equity, diversity, and inclusivity as critical for enriching experiences, enhancing innovation, and promoting quality of life. Through various outreach and home-based programs HPS works to ensure vulnerable residents receive the same quality of care provided to all populations in the city. HPS staff has undergone mandatory training to better understand and value the diversity that makes up the community and the workforce. Furthermore, HPS recruitment activities have sought to increase diversity within the service as HPS strives to establish a workforce that reflects the community it serves. This Master Plan sets out transformational objectives to achieve this goal such as building relationships with diverse communities to expand recruitment activities and developing a college paramedic recruitment program to support students of diverse backgrounds in securing employment with HPS.

PRIORITY: Healthy and Safe Communities

In addition to providing on-scene emergency medical response, HPS provides a variety of home-based programs that provide clinical support to vulnerable populations and help improve their quality of life while avoiding hospital visits. Mobile Integrated Health (MIH) provides programs and services such as free clinics in buildings where seniors reside, monitoring client's health in their homes through remote technology, conducting home visits and offering at-home care for those awaiting placement in long-term care homes. MIH also provides and maintains Automated External Defibrillators (AEDs) for residents to access in public facilities throughout the city. The need to strengthen these essential programs over the coming years is discussed in this Master Plan.

PRIORITY: Clean and Green

HPS supports the urgent need to reduce greenhouse gas emissions to help reverse the negative impact of climate change on the environment. All new ambulances have anti-idling technology which automatically turns the engine off and on which reduces carbon emissions, saves fuel, and extends the life of the vehicle's charging system components. HPS has also recently added hybrid ambulances to its fleet. These are designed to reduce carbon emissions and save fuel. This Master Plan will propose the development of a comprehensive plan to further reduce the carbon footprint of HPS.

PRIORITY: Our People and Performance

Paramedics in Ontario are governed by the regulations and standards issued pursuant to the *Ambulance Act*. Hamilton's paramedics are certified annually by a physician to conduct delegated controlled medical acts as per the *College of Physicians and Surgeons of Ontario*. All of these requirements are supported by HPS's comprehensive continuing medical education and rigorous quality assurance and improvement program that seeks to strengthen performance to ensure high quality services are delivered to Hamilton's residents. HPS realizes that a service is only as good as the people who deliver the service. To that end, HPS will continue to focus on and enhance access to the tools and information staff require to do their jobs effectively. Furthermore, paramedics require additional supports to ensure their health and well-being so they can continue to deliver quality care despite the pressures of their jobs. This Master Plan will outline a 'people plan' to ensure staff can successfully and safely carry out their roles in a positive and supportive work environment.

The City's Strategic Plan also defines the corporate culture which reflects the City's values and the how employees interact with each other and the people they serve. The culture revolves around five pillars:



The development of the HPS Master Plan is guided by the priorities and values of the City's Strategic Plan.

1.2 Current Climate

A number of compelling events have occurred during the time this Master Plan was in development. These realities were taken into consideration and helped to inform many of the transformational objectives set out in this Plan.

Provincial Health Care Changes

As this Master Plan was being developed, the Ontario government presented their 2019 budget, *Protecting What Matters Most Act*. The budget includes modernizing the health care system to create a seamless, patient-centred system. The budget declares the need for urgent action to ensure the system of health care is sustainable and accessible to all patients and their families. A component of this modernization is the potential for restructuring of land ambulance service. The budget describes the intention to consolidate services across the province and better integrate them with provincial dispatch centres:

The government will streamline the way land ambulance dispatch services are delivered by better integrating Ontario's 59 emergency health services operators and 22 dispatch centres. The government will continue to support first responders by providing the right tools to ensure the right responders get to the right place with the right information at the right time, and by integrating emergency health services into Ontario's health care system.¹

Similarly, the budget proposed merging 35 public health units to 10. Consequently, the MOH introduced the *Connecting Care Act*, 2019 which authorizes the MOH to create Ontario Health. Ontario Health has a broad mandate to integrate the health system. Ontario Health Teams (OHT) are being established at the local level to promote more integrated services for patients.² In November 2019, Hamilton established one of the first Health Teams in Ontario. The intention is that all publicly funded health service providers will be a part of these teams and operate within a single accountability agreement with the MOH. At the time of writing this Plan, details about the changes to ambulances services have not been released and therefore the impact to HPS specifically is not known. For this reason, the objectives in this Master Plan do not address any potential changes that may occur to the structure of the ambulance service in Ontario in the future. The HPS Master Plan objectives for service delivery over the next decade are based on local needs and the need to strive for better service integration. The Hamilton Paramedic Chief's participation on the Greater Hamilton Health Network ensures that the strengths and challenges of HPS will inform the restructuring of Ontario's health care system.

²⁰¹⁹ Ontario Budget, Protecting What Matters Most Act

² Ontario Health Teams: Guidance for Healthcare Providers and Organizations, April 2019



Global Health Crisis

In March 2020, Hamilton identified its first case of the COVID-19 virus, midway through the development of this Master Plan. HPS had to promptly respond to this constantly evolving public health crisis which resulted in many operational changes. From implementing a program to manage critical supply of inventory and equipment, securing a system to monitor and distribute personal protective equipment, instituting decontamination processes for all vehicles and equipment, ensuring vehicles were fully staffed when paramedics were quarantined, training paramedics to assist with COVID-19 testing, vaccinations and vaccine aftercare, establishing an infectious disease paramedic team, participating in a COVID-19 simulation event with hospital partners, conducting mass evacuations of congregate settings experiencing COVID-19 outbreaks, assisting with inter-regional hospital transfers for COVID-19 patients, as well as ensuring the safety and well-being of frontline paramedics to adjusting to working remotely with most of the HPS support staff. Focus on overcoming the challenges brought about by the pandemic disrupted some of the everyday business including the completion of this Plan. However, it also highlighted opportunities for change and innovative ways to improve the delivery of paramedic services which have been incorporated into this plan.

Social Justice Movements

In addition to the global pandemic, much of the world also experienced a swell in activism over racism and social injustices. Hamilton, along with other major cities around the world, dealt with incidents of hate and injustice, protests, demonstrations and calls for leaders to make changes that would ensure equity and justice for those who are marginalized. Most recently, the discovery of unmarked graves of residential school children has again brought to light the need to respect and celebrate the cultures, experiences, and contributions of diverse populations. The City of Hamilton has recently formed an Equity Diversity and Inclusion Steering (EDI) Committee whose mandate it is to develop a roadmap for advancing EDI within the organization and when serving the community. This Master Plan recommends that the roadmap is adopted by HPS to strengthen EDI within the service. In addition, HPS will establish a plan for building relationships with diverse communities to understand how they can be served in more culturally appropriate ways.

1.3 Purpose, Vision, Priorities, Scope

PURPOSE

The purpose of this Master Plan is to provide guidance with respect to the delivery of paramedic services in Hamilton over the next ten years. This 10-year plan, the first of its kind for HPS, considers the diverse and dynamic needs of people in Hamilton and sets objectives that will equip HPS with the tools necessary to successfully meet those needs now and into the future.

VISION

The vision for the Master Plan is to establish the groundwork to achieve a service that is transformative. Through technology advancements, innovative thinking, resource allocation and the optimization of operations, this Master Plan seeks to alter the way HPS delivers services that better serves a complex and ever-changing community.

PRIORITIES

The HPS Master Plan is built on five priorities that led to a number a of objectives to action. The priorities are as follows:

Operational Integration – A system of health care services that is well-coordinated and integrated enhances access to services, provides seamless comprehensive patient care and reduces duplication of services and costs. HPS is committed to operating in a more integrated fashion both within the organization and the health care system.

Infrastructure Progression – To achieve optimal performance, sufficient infrastructure needs to be in place. This includes adequate facilities, availability of resources and advanced information technology systems to ensure HPS operates effectively and efficiently.

Service Delivery Optimization – By enhancing current activities HPS can maximize how services are delivered. By ensuring resources are available to respond when needed and paramedics are equipped to serve diverse needs HPS can improve service in a cost-effective manner.

Positive Work Culture Elevation – A workplace that is safe, just and engages employees increases morality, performance, and retention. HPS is committed to strengthening the workplace culture by developing its people and keeping them healthy and satisfied in an inclusive environment.

Healthy and Safe Communities Protection and Promotion – Having equal access to services and supports required to be healthy and well in a community in which people feel safe from harm is the focus of HPS operations. HPS is dedicated to enhancing efforts to promote and protect the health of the community through proactive and responsive activities.



SCOPE

The HPS Master Plan sets out to describe the current level of service delivery, through a review of resources including facilities, vehicles and staffing as well as an analysis of operational data including response times, call volume, events, and deployment model. An overview of Hamilton's demography, population growth and social determinants of health is also provided for a fulsome understanding of the current state in which paramedic services are delivered. Where appropriate, comparisons will be made to the performance data from similar services in the province.

Furthermore, the forecasted state of service delivery is also described through an analysis of systemic trends, trends relating to population growth and demographics, as well as predicted call volume.

Challenges related to operating paramedic services in Hamilton are also described with corresponding objectives. Objectives focus on making transformational changes in the way HPS conducts business and optimizing service delivery through developing people, technology advancements and resource alignment. Implementing these objectives will not only ensure HPS is prepared to deliver optimal service in a complex and evolving environment over the next ten years but also that HPS is a leader of innovation among land ambulance services.

1.4 Methodology

The process to develop the HPS Master Plan included the collection, analysis, and review of various key components:

- Provincial Documentation A number of reports and legislative requirements from the province must be considered in delivery ambulance services in Ontario:
 - Patients First: Action Plan for Healthcare
 - Ambulance Act R.S.O. 1990, c. A.19
 - 2019 Ontario Budget, Protecting What Matters Most Act
 - Coroner's Act, R.S.O. 1990, c. C.37
 - Mental Health Act, R.S.O. 1990, c. M.7
 - Healthcare Consent Act, 1996
 - Controlled Drugs and Substance Act, S.C. 1996, c. 19
 - Personal Health Information Protection Act, 2004
 - Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990
 - Employment Standards Act, 2000
 - Occupational Health and Safety Act, R.S.O. 1990
 - Criminal Code, R.S.C., 1985, c. C-46
 - Child, Youth and Family Services Act, 2017
 - Highway Traffic Act, R.S.O. 1990, c. H.8
- Strategic Alignment City of Hamilton Strategic Plan 2016-2025

- Surveys Various surveys were conducted by the City of Hamilton and the HPS that have informed the development of this Master Plan:
 - Our City Survey (2019) level of resident satisfaction with City of Hamilton services
 - Our People Survey (2017) level of engagement of City of Hamilton employees
 - HPS Citizen Survey (2018) residents' expectations and satisfaction levels regarding services delivered by the HPS
 - HPS Website feedback from patients and patients' families
 - Mobile Integrated Health Client Surveys clients' level of satisfaction with the @Clinic, @Home and Flu Clinic programs
- Consultations Engagement of both internal and external partners was critical to the planning process, including:
 - Stakeholder Consultations key partners provided their perspective of potential areas of focus for the HPS over the next decade
 - HPS Leadership Team leaders provided their input and feedback into the future direction of HPS
 - HPS Employee Feedback paramedics identified areas for improvement in the work environment
- Internal Review an internal review of operations including facilities, vehicles and deployment and an analysis of data including current and historical call demand and performance data
- External Review a review of similar-sized services was undertaken to be able to draw comparisons
- Predictive Analysis a customized digital tool based on HPS response data provides a spatial forecast of call volumes and a prediction of response times in tune to the practices of the HPS

1.5 Master Plan Outline

The HPS Master Plan is a compilation of consultations results, survey responses, a comprehensive analysis of operational data and predictive data. Also taken into account are the characteristics of the city that influence the services delivered by HPS. Combined, this information forms a blueprint for service delivery over the coming decade.

Following the current Section 1.0 that introduces the Master Plan,

3ECTION 2.0

profiles the City of Hamilton including its unique geography, demographics, the growing and aging population, and the health of its residents as related to the social determinants of health. The city's growth and development, and transportation network are also described.

3.0

provides a detailed description of HPS, its organizational structure, workforce, scope of practice and other key elements that contribute to its operations. It includes performance metrics and a profile of those who utilize HPS services. This section also outlines the results of various surveys of residents' expectations of HPS and their level of satisfaction with programs and services. Results of consultations with key partners and feedback from Hamilton's paramedics are also summarized to provide a fulsome picture of HPS through varying perspectives.

SECTION 4.0

describes the system drivers, these are the leading factors that affect the performance of HPS including staffing, call volume, demand by time of day and days of the week, time on task and staffed vehicles. This section also forecasts the service demand over the course of this Master Plan. Challenges to performing optimally are described and solutions to overcome them are recommended.



Ways to transform and optimize service delivery are presented in Section 5.0, such as reforming dispatch, enhancing deployment activities, mitigating off-load delay, expanding Mobile Integrated Health and creating a clinical hub, enhancing the clinical practice of paramedics, implementing specialty programs, preparing for disruptive events, modernizing logistics and centralizing some activities for the City of Hamilton, advancing technology to provide personnel with the tools they need to deliver quality services and achieving a safe and fair workplace culture.

Section 6.0

discusses HPS facilities and the current and long-term needs to accommodate a growing and evolving service.

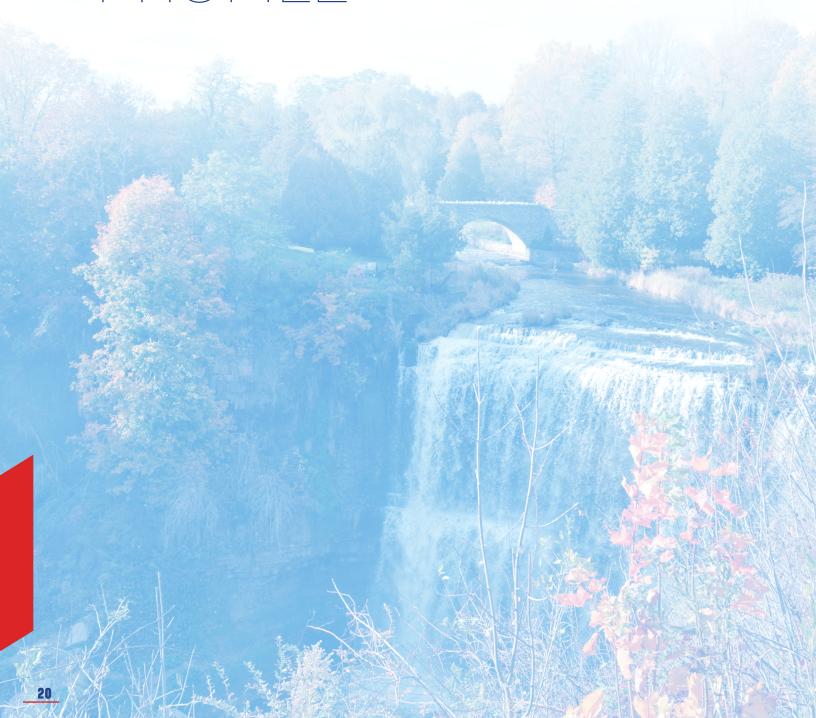
7.0

outlines a 'People Plan' to ensure a workforce that is healthy, engaged and has opportunities to develop in a positive, inclusive, and safe workplace environment that supports optimal performance.

8.0 10.0

summarizes the objectives set out in the previous sections including a proposed timeline for implementation. Objectives are organized according to the five priority areas. Section 9.0 offers a summary of the projected financial impact of the objectives with known or anticipated costs presented in three alternative models. Finally, Section 10.0 contains the appendices: resident and employee survey results, the HPS User Profile complied by Public Health Services and HPS service demand statistics.

CITY OF HAMILTON PROFILE





2.1 Geography

Hamilton is a city with a land area of 1,117 square kilometres³ divided into 15 Wards. It is the fifth largest municipality in Ontario and the tenth largest in Canada. Hamilton is a port city that wraps around the westernmost part of Lake Ontario. The city's northern limit is marked by the Hamilton Harbour. The Niagara Escarpment runs through the middle of the entire city dividing the cityscape into lower and upper portions. Hamilton's escarpment is characterized by its hiking and biking trails such as the Bruce Trail, forests, cliffs, over 150 waterfalls⁴ and a variety of ecosystems.

Hamilton is at the centre of the Golden Horseshoe which is surrounded by the Greenbelt, permanently protected agricultural and natural areas. The Greenbelt, which includes the Niagara Escarpment, covers a large portion of the city's total land mass.⁵

Hamilton has a number of bodies of water both within and on its borders. These include Lake Ontario, Hamilton Harbour, Cootes Paradise and many small lakes, ponds, and creeks within conservation areas and throughout the city.

Recently, there has been an increase in the number of people exploring Hamilton's natural treasures. The bodies of water, waterfalls and wooded trails along the escarpment have attracted more people in recent years which has led to more mishaps, such as rope rescues at waterfalls and other incidents requiring emergency medical attention is required.

2.2 Population

HPS provides service to almost 537,000 residents living in the city of Hamilton with a population density is approximately 480.6 people per square kilometres. The median age of Hamilton's population in 2016 was 41.5 years. Hamilton's population is an aging one with just over 17% of residents, or about 93,000 people, aged 65 years or older.⁶ Hamilton's senior population increased 23% from 2006, almost four times greater than Hamilton's overall growth. The number of seniors 85 years and older increased by 55% in 2016 from 2006. The highest number of seniors reside in Hamilton's east end below the escarpment (Ward 5). There are also higher than average numbers of seniors in the central mountain area (former Ward 7) and Dundas (Ward 13).⁷

³ Statistics Canada, Census 2016

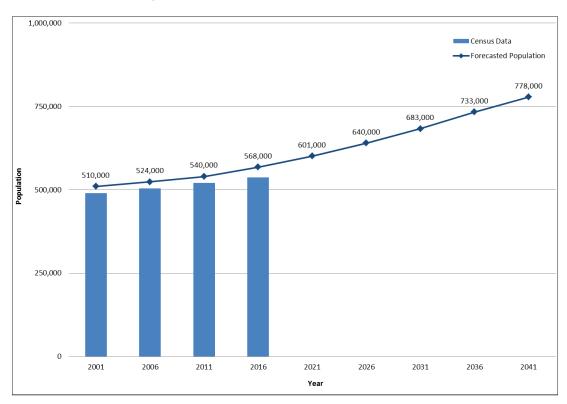
⁴ Smithsonian.com Just 50 Miles From Niagara Falls Lies the True Waterfall Capital of the World by Jennifer Nalewicki (July 24, 2017)

⁵ City of Hamilton, Greenbelt Boundary Review Public Consultation Presentation 2015 https://d3fpllf1m7bbt3.cloudfront.net/sites/default/files/media/browser/2015-09-10%2008%3A56/greenbelt-boundary-pic-panels.pdf

⁶ https://projects.thespec.io/census/

⁷ https://www.hamiltoncommunityfoundation.ca/vital-signs/seniors-in-hamilton

Children aged 14 years and under account for approximately 16% of the city's population. For the first time in Hamilton, seniors outnumber children.8



City of Hamilton Population Forecast, 2021 to 2041

Sources: Statistics Canada, Census 2001, Census 2006, Census 2011 and Census 2016 Hemson Consulting Ltd (2012). Greater Golden Horseshow Growth Forecasts to 2041, Technical Report

Over the course of this ten-year plan, Hamilton's population is projected to increase to approximately 680,000 by 20319 with seniors being the fastest growing segment of the population. By 2031, almost 22% of Hamilton's population will be 65 years old or older.

Hamilton's population is forecasted to grow to approximately 780,000 by 2041. This forecasted increase in the senior population will significantly increase the demand on services provided by HPS over the next ten years and beyond.

⁸ Statistics Canada, Census 2016

⁹ GRIDS2: Growth Summary 2006-2016

¹⁰ GRIDS May 2006

¹¹ Hemson Consulting Ltd (2012). Greater Golden Horseshoe Growth Forecasts to 2041, Technical Report

¹² https://www.hamiltoncommunityfoundation.ca/vital-signs/seniors-in-hamilton

2.3 Social Determinants of Health

In addition to considering the Hamilton's aging population, HPS must consider the social determinants of health of Hamilton's residents when planning for service delivery. These are the social and economic factors that impact the health and well-being of people either positively or negatively. They relate to a person's income, education, and employment as well as experiences of discrimination and the distribution of resources and power.

Understanding the social determinants of health and how they impact the residents of Hamilton can help HPS plan the delivery of services needed to support health equity and increase opportunities for better health for all members of the community.

Income and Social Status

Income and social status are key determinants of health. The higher on the income and social hierarchy means more resources for quality housing and food.

The average total household income in Hamilton in 2015 was just under \$88,000. However, almost 81,000 residents were living with low income using the Low Income Measure after tax (LIM-AT) or just over 15% of the total population. Hamilton's average is slightly higher than the provincial average of approximately 14%. Furthermore, in 2015 almost 23% of children (up to 5 years old) in Hamilton lived in low income families (using the LIM-AT) higher than the provincial average of about 18%. The second residual income in Hamilton in 2015 almost 23% of children (up to 5 years old) in Hamilton lived in low income families (using the LIM-AT) higher than the provincial average of about 18%.

The average price of a house in Hamilton has increased significantly in the last few years. In 2017, the average sale price was just over \$500,0000¹⁶ compared to 2021 with the average cost being closer to \$800,000.¹⁷ Hamilton has had some of the fastest rising home prices in Canada. Hamilton's cost of rent is also increasing at a fast pace. In 2018, the average market rent was just over \$1,000 per month, up 23.9% from 2014. This increase is outpacing the inflation rate and the modest growth in household income.¹⁸ The city-wide vacancy rate for the most affordable units was 2.1% in 2017.¹⁹ As of December 31, 2020, there were 6,647 households on the Access-to-Housing Wait List for social housing in Hamilton, up from 6,231 in 2019.²⁰

As a result of social, economic and health inequities which have escalated during the pandemic, there has been a rise in the establishment of encampments in Hamilton. Encampments are set up in unsheltered locations by those experiencing homelessness. This has increased calls for paramedics for medical response as well as outreach activities to assess and provide necessary supports for people living in encampments. In response, a paramedic has been added to the Social Navigator Program (SNP) team to work with encampment residents.

¹³ City of Hamilton, Hamilton Profile – Our Community

¹⁴ Statistics Canada, Census 2016

¹⁵ Ibid

¹⁶ https://www.hamiltoncommunityfoundation.ca/vital-signs/housing-2018

¹⁷ https://www.rahb.ca/rahb-market-area-saw-slight-decrease-in-sales-activity-and-average-price-in-may-compared-to-the-previous-month

 $^{18 \}quad Hamilton\ Profile - Our\ City\ https://www.arcgis.com/apps/MapSeries/index.html?appid=8d7d72677d844bdd8a7acb641e3acd8a$

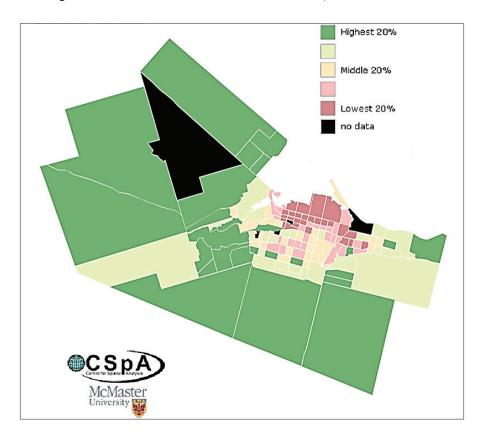
 $^{19\} https://www.hamiltoncommunity foundation.ca/vital-signs/housing-2018$

²⁰ City of Hamilton, Performance and Evaluation Specialist, email correspondence September 2, 2021

Food insecurity results from the inability to consistently access adequate food for a healthy diet due to financial constraints. In 2016, 14.8% of Hamiltonians, or over 76,000 people experienced some food insecurity.²¹ In 2019, food banks in Hamilton were visited 233, 747 times.²² The reliance on food banks has risen sharply during the COVID-19 pandemic while donations have decreased.

In a 2010 news article series entitled Code Red, the Hamilton Spectator explored the impacts social determinants of health have on people living in Hamilton. Specifically, the series highlighted how poverty has affected the health of the community. The gap in health outcomes between the affluent and the low-income neighbourhoods in the city was documented. For example, in impoverished neighbourhoods the rates of emergency room visits are higher, more people are without a family physician, there are more respiratory-related problems, more cardiovascular incidents, more psychiatric emergencies and higher rates of low birth weight babies as compared to the wealthier neighbourhoods. Most notably, the Code Red series showed a variation in average life expectancy of 21 years between the richest and poorest neighbourhoods in Hamilton.²³

Overall Rankings Based on Cumulative Scores for 24 Health, Social and Economic Variables



Source: http://media.metroland.com/thespec.com/statistics_flash

 $^{21\} https://www.hamiltoncommunity foundation.ca/vital-signs/low-income-2018$

²² http://map.feedontario.ca

²³ http://thespec-codered.com

In response to these findings, the City of Hamilton identified 11 neighbourhoods, mostly in the lower inner city, as priority neighbourhoods (see map below). The health and wealth disparities in these areas prompted the City to create a new Division dedicated to working with neighbourhood residents to address the inequities. In 2019, almost ten years later, the Spectator revisited the Code Red project only to find that the health outcomes in these neighbourhoods worsened. The only two areas with significant improvements were the rate of low birth weight and access to family physicians.²⁴

Beasley Gibson/ Landsdale Stinson South Point Riverdale Rolston Davis Creek

Hamilton's Neighbourhood Action Strategy Boundaries

Source: Social Planning and Research Council of Hamilton (SPRC) 2013

HPS understands the challenges facing these neighbourhoods and is supporting residents through its recently expanded Community Paramedicine Program, now called Mobile Integrated Health (MIH). A variety of home-based health care programs and services are provided to vulnerable individuals. This enables people to received health care in their own residences to help them to live well and improve their quality of life. This also helps to reduce the pressures on the health care system by avoiding hospital visits.

²⁴ https://projects.thespec.io/codered10

Employment and Working Conditions

Employment in safe conditions with minimal stress-related demands that provides a steady and sufficient income contributes to overall good health.

By the end of 2019, Hamilton had an unemployment rate of 4.3% lower than the provincial rate of 5.6%. Since 2017, Hamilton's labour market saw significant growth though not all employment during this growth period was stable. A study from McMaster University revealed that precarious work such as contractual or temporary positions and self-employment is a growing area of employment. In 2013, nearly 60% of Hamilton's millennials (born 1981 to 1997) had precarious employment which is shown to have an affect on people's mental health and their overall health.²⁵

With the onset of the pandemic, Hamilton's economy has been negatively impacted. In 2020, the unemployment rate rose to 8.8% with over 38,000 people unemployed. However, Hamilton's diverse economy that includes health care, public administration, manufacturing, and construction has seen some growth during the pandemic. With the availability of the vaccine economists are predicting a strong economic rebound in late 2021.²⁶

The labour force participation rate measures the number of people either employed or actively looking for employment. In 2016, Hamilton's overall participation rate was just over 63%.²⁷ However, the rate varies greatly among the city's neighbourhoods ranging from 45% to 75%.²⁸

Excluding the impact of the pandemic, on average, 20,000 residents in Hamilton are unemployed at any given time. Based on an analysis of persons using employment services in Hamilton, the trends in unemployment include persons with disabilities, newcomers and visible minorities, people aged of 15 to 24 years old, people who have been unemployed for a long period of time and those with low levels of education.²⁹

Education and Literacy

Education increases opportunities for employment, a stable income and job satisfaction, all of which contribute to good health. Education also increases the ability to understand and access information about achieving and maintaining health.

In 2016, 25% of Hamilton's population aged 25 to 64 years were university educated at the bachelor level or above. Over 27% had a college diploma or the equivalent and just over 26% had secondary school as their highest level of education. Just over 12% of Hamilton's adult population had not obtained a high school certificate³⁰ which was higher than the provincial average of around 10%.³¹

The top three major fields of study in 2016 were architecture, engineering, and related technologies (12.5%); business, management, and public administration (11.5%); and health and related fields (10.7%).³²

²⁵ McMaster University and United Way Toronto. 2015. The Precarity Penalty. https://www.economics.mcmaster.ca/pepso/documents/precarity-penalty.pdf

²⁶ Workforce Planning Hamilton, Trends in Hamilton's Labour Market: Local Labour Market Plan Update 2020

²⁷ City of Hamilton, Hamilton Profile - Our Community

²⁸ https://www.hamiltoncommunityfoundation.ca/vital-signs/economy-2018

²⁹ Workforce Planning Hamilton. Trends in Hamilton's Labour Market: Local Labour Market Plan 2018

 $^{30 \}quad \text{City of Hamilton, Hamilton Profile} - \text{Our Community https://www.arcgis.com/apps/MapSeries/index.html?appid=8d7d72677d844bdd8a7acb641e3acd8a} \\$

³¹ Statistic Canada, Census 2016

³² City of Hamilton, Hamilton Profile - Our community

Childhood Experiences

Children's experiences early in life shape their development and impacts their health later in life. A child's development is affected by socioeconomic status, support network, a safe nurturing environment, healthy habits, and genetic makeup.

In 2015, children ages 0 to 17 years had the highest rate of low income in Hamilton.³³ As reported by the original Code Red series, child poverty is concentrated, with some neighbourhoods in the city experiencing rates of over 55% while others have no child poverty.³⁴

According to Code Red: Ten Years Later, there has been a significant increase in hospital stays from 2010 to 2017 for children and teens who have been treated for anxiety, mood disorders and substance use. In 2017, young people under the age of 20 visited the Emergency Department 296 times or almost six times per week. This increase is rooted in poverty.³⁵

Mental illness in young people leads to mental illness in adulthood. Mental health problems can disrupt education and employment and can lead to chronic health problems, substance use and social isolation. One of the reported impacts of the pandemic is a deterioration of mental health in a large majority of children and youth due to the stress from social isolation.³⁶ As rates of mental illness in young people increase, the impact to the community and the demand on HPS resources will continue to increase.³⁷

Among Hamilton's senior kindergarten classes, almost 31% of children are vulnerable in at least one domain of development which includes physical, social, emotional, cognitive development and communication skills.³⁸ In some areas of the city, the vulnerability rate is almost 47%.³⁹

Physical Environments

The physical environment such as air, water, food, and soil have an impact on health. Toxins in the environment can cause a range of illnesses and lead to premature death.

Hamilton has had challenges dealing with poor air quality due to the city's unique topography which affects how pollutants are dispersed in the lower city in addition to the pollution from industry and transportation. ⁴⁰ While air quality has significantly improved over the past two decades with a reduction in cancer-causing pollutants and smog advisories, a local study shows disparities in air quality at the neighbourhood level. While overall, Hamilton residents have a 4% increased risk of premature death from air pollution, in certain parts of the city that number nearly doubles. ⁴¹

³³ Ibid.

³⁴ http://thespec-codered.com

³⁵ https://projects.thespec.io/codered10

³⁶ Cost, K., Crosbie, J., Anagnostou, E., et al., (2021). Mostly worse, occasionally better: impact of COVID-19 pandemic on the mental health of Canadian children and adolescents. European Child & Adolescent Psychiatry. https://link.springer.com/article/10.1007/s00787-021-01744-3

³⁷ https://projects.thespec.io/codered10

³⁸ https://www.hamilton.ca/government-information/trust-and-confidence-report/early-years-system-management-profile

³⁹ https://projects.thespec.io/census

⁴⁰ https://globalnews.ca/news/4158298/hamilton-air-quality-improving-report

⁴¹ https://www.thespec.com/news-story/8902503-dramatic-air-quality-improvements-in-hamilton-with-a-caveat

Social Supports and Coping Skills

The support of social networks such as family, friends and the community and the ability to cope with problems contribute to making decisions that promote health. Being socially disconnected makes it more difficult for people to access information, transportation and emotional support and can lead to negative health effects such as stress, depression, malnutrition, and even premature death in seniors.⁴²

According to the results of a recent Angus Reid survey, Canadians more likely to be socially isolated and lonely are visible minorities, Indigenous peoples, LGBTQ2 individuals and those with mobility challenges. The onset of the pandemic has exacerbated social isolation for these groups who are disproportionately affected. People who are less likely to experience social isolation and loneliness are married, have children, higher incomes and involved in faith-based activities. At

In 2016, 19% of Hamilton's population identified as visible minorities and 2.3% identified as Aboriginal. Almost 36% of Hamilton's population reported having activity limitations, higher than the provincial average of about 32%. 45 Over 55% of the population (age 15 and older) were married (46.9%) or in a common-law relationship (8.7%) and just over 63% of all families in the city had children.

Pandemic aside, social isolation has been a growing problem, particularly among seniors, especially those with low income and living in rural areas. ⁴⁶ In 2015, approximately 12,000 seniors in Hamilton were living in isolation. With an increase in the aging population in Hamilton, the health-risks related to socially isolated seniors are a challenge that must be addressed by HPS. In 2018, seniors age 65 years and older made up 45% of HPS's total call volume.

Healthy Behaviours

A person's beliefs and actions to promote self-care and prevent diseases affect their health or mortality. Examples of behaviours that risk health include smoking, heavy drinking, diet, and physical activity.

The percentage of smokers in Hamilton Wards ranges from 18% to 40% for males and 14% to 33% for females. Males who consume higher levels of alcohol are consistently between 10% and 12% and between 6% and 8% for females. The proportion of population in Hamilton Wards who do not consume enough fruits and vegetables (less than five times per day) ranges from 56% to 70% for females and is consistently between 72% and 78% for males. The percent of people who are physically active in Hamilton's Wards is consistently between 20% and 27% of females and for males it is between 28% and 37%. 47

HPS has been working with Hamilton Public Health Services to support a smoking cessation program. HPS provides clients of MIH with nicotine replacement products and educational materials. Clients are then referred to Public Health's smoking treatment program which offers sessions to help people quit smoking along with counselling support. The program prioritizes pregnant women, young families, individuals living in poverty, individuals living with a mental illness and people without a family doctor.

⁴² Hamilton Seniors Isolation Impact Plan, Info Sheet 5: How Does Social Isolation Affect Health?

⁴³ http://angusreid.org/social-isolation-loneliness-canada

⁴⁴ Ibid.

⁴⁵ Canadian Council on Social Development's Community Data Program (email correspondence July 17, 2019)

⁴⁶ https://socialisolation.ca

⁴⁷ City of Hamilton, Ward Profiles

Access to Health Services

Having health services available and readily accessible can contribute to maintaining and restoring health and preventing disease.

In 2015-2016, 94% of Hamilton's population reported having access to a family doctor. This exceeds the provincial average of approximately 90% and is one of the best rates in the province. 48

Hamilton is home to a number of hospitals including a mental health and addictions hospital, cancer centre, children's hospital, and a chronic care hospital for older adults. In addition, there are two urgent care centres in Hamilton. The McMaster University Medical Centre is located in Hamilton and offers a range of adult specialty clinics, day surgery and labour and delivery programs.⁴⁹

Hamilton Health Sciences

- Hamilton General Hospital
- Juravinski Hospital and Cancer Centre
- McMaster Children's Hospital
- St. Peter's Hospital chronic care for older adults
- Hamilton Health Sciences Main Street West Urgent Care Centre

St. Joseph's Healthcare Hamilton

- St. Joseph's Healthcare Hamilton Charlton Campus
- St. Joseph's Healthcare Hamilton West 5th Campus (mental health and addictions services)
- St. Joseph's Healthcare Hamilton King Campus urgent care centre

In 2000-2014, the rate of hospitalizations per 1,000 Hamiltonians was approximately 81 people. In 2017, the rate of Emergency Department visits in Hamilton was over 486 people per 1,000 people with almost 23 of these people accessing Emergency Departments four or more times a year.⁵⁰ In 2019, 53,248 patients were transported by HPS to hospitals, an average of 146 a day. Slightly fewer patients, 48,412 or 132 per day, were transported in 2020, due to a decrease in 911 calls during the early days of the pandemic.

Hamilton has four community health centres funded by the Local Health Integration Network (LHIN) including a francophone centre and an aboriginal health centre. Community health centres provide clinical care from doctors, nurse practitioners, nurses, dietitians, social workers, and other clinical health providers.

In addition, Hamilton has a wide range of community support services and programs to support residents in achieving and maintaining their physical and mental health. With expanding services including public education, providing care in the community and at residents' homes and ambulance transports, HPS has become a critical component of Hamilton's system of health care.

⁴⁸ https://www.hamiltoncommunityfoundation.ca/vital-signs/health-and-well-being-2018

⁴⁹ https://www.hamiltonhealthsciences.ca/about-us/our-organization/our-locations/mcmaster-university-medical-centre

⁵⁰ City of Hamilton, Hamilton Profile - Our Community

Biology and Genetic Endowment

The organic make-up of the human body and inherited attributes are a fundamental determinant of health.

Some chronic diseases such as diabetes, heart disease, cancer and high blood pressure are caused by mutations in genes combined with environmental factors. Chronic diseases are the leading cause of illness, disability, death, and overall poor quality of life. In 2016, rates of diabetes (7.2%), heart disease (3.7%) and cancer (1.2%) in residents of Hamilton aged 12 years and older were similar to the provincial rates. However, Hamilton had a higher rate of high blood pressure with just over 20% as compared to the province with approximately 18%.⁵¹

Diabetes, heart disease and high blood pressure increase risk for stroke. To help detect and enhance responsiveness to the needs of a person having a stroke, HPS partnered with the Heart and Stroke Foundation and added the F.A.S.T. decal on ambulances. The acronym helps raise awareness about the signs of a stroke: Facial drooping, Arm weakness, Speech difficulties and Time to call emergency services. HPS also collaborates with Hamilton General Hospital's Heart Investigation Unit (HIU) to enable paramedics to transport heart attack patients directly to the HIU rather than to the Emergency Department where there may be a delay. An HIU medical team is alerted to prepare to receive and treat the patient immediately upon arrival. In 2020, HPS had 951 responses for strokes and 134 ST-Elevation Myocardial Infarction (STEMI) responses, a serious form of heart attack.

Gender

Inequities based on gender not only affect employment, income and housing but also access to health services. As a result, gender influences health outcomes.

In 2016, Hamilton's population comprised of just over 51% female and approximately 49% male. For residents aged 75 years and over, about 59% were females and almost 41% were males. The difference between the proportion of females and males becomes increasingly greater among older age groups. For those 100 years and older, 80% were females and only 20% males.⁵²

Fewer females than males were looking for work in Hamilton in 2016 as the labour force participation for females was 63% versus 67% for males. The unemployment rate for females in 2016 was just slightly lower than males (7% versus 7.5% respectively).⁵³ However, the pandemic has disproportionately impacted females as they experienced more job loss than males since they tend to work in the sectors hardest hit by the pandemic such as retail, hospitality and food. ⁵⁴

In 2015, the average income for females in Hamilton was \$36,815, below the city average of \$43,099 and less than the average for males of \$48,918. Females also had higher rates (15.2%) of poverty (using LIM-AT) compared to the city (14.5%) and to males (13.7%) aged 18 to 64 years of age. ⁵⁵ The difference in poverty rates between females (13.8%) and males (9.1%) increases among older Hamiltonians aged 65 and above.

⁵¹ https://www.hamiltoncommunityfoundation.ca/vital-signs/health-and-well-being-2018

⁵² City of Hamilton, Hamilton Profile - Our Community

⁵³ Statistics Canada, Census 2016

⁵⁴ Statistics Canada, Economic impacts and recovery related to the pandemic https://www150.statcan.gc.ca/n1/pub/11-631-x/2020004/s5-eng.htm

⁵⁵ Statistics Canada, Census 2016

The nationally coordinated Point-in-Time Count of homelessness conducted by the City of Hamilton in 2016 showed that more men (72%) than women (28%) are impacted by homelessness. However, more women (66%) become homeless due to trauma than do men (37%).⁵⁶

The economic and labour market disruptions that occurred during the pandemic disproportionately affected the service sector which is predominantly occupied by women. Women were one of the groups hardest hit by job loss in Hamilton experiencing an 18% decrease in employment.⁵⁷ A recent report in Hamilton revealed because of the pandemic women's finances have been negatively impacted, they face challenges re-entering the job market and are struggling to balance working and caregiving.⁵⁸

Culture, Race/Racism

The cultural values, customs and beliefs of a person or community and one's race can have an impact on their health. Those whose practices differ than the dominant cultural values and those who are of a race distinct from the dominant group may face marginalization and stigmatization. Losing cultural traditions, language and access to culturally appropriate health care can adversely affect mental and physical health. Furthermore, inequitable treatment of marginalized groups from providers of housing, health care, social services and employment can negatively impact health. Recent events have highlighted the inequitable treatment of minorities and racialized people. The incidents that led to a resurgence in the Black Lives Matter movement, the discovery of remains of hundreds of Indigenous children on former residential school grounds, the rise in hate crimes against Asians and Muslims, have made it clear that not all people receive fair and equitable treatment which can have a devastating impact on health and well-being.

About 25% of the population of Hamilton is immigrants.⁵⁹ At least 23% of Hamilton residents have a non-official language as their mother tongue and almost 2% have no knowledge of English or French.⁶⁰ Over 100 languages other than English are spoken in Hamilton households.⁶¹ Hamilton is home to more than 80 ethnicities with 19% of Hamiltonians identifying as visible minorities.⁶²

The pandemic has brought to light inequitable access to essential services including health care experienced by people of minority and racialized groups who have also experienced more job loss than other groups. ⁶³ HPS must ensure that anyone who requires the service of a paramedic will be treated with dignity and be given the best possible care for a positive health outcome. Moreover, HPS must continue to work to expand programs aimed at supporting the most vulnerable in the community to ensure they are provided and can readily access quality health care. This Master Plan identifies objectives to strengthen the delivery of services for the best possible outcome for every person served.

⁵⁶ https://www.hamiltoncommunityfoundation.ca/vital-signs/housing-2018

⁵⁷ SPRC Employment Impacts of COVID-19 in the Hamilton CMA http://www.sprc.hamilton.on.ca/wp-content/uploads/2020/08/SPRC-Hamilton-Social-Landscape-Employment-impacts-of-COVID-19-August-2020.pdf

⁵⁸ Women out of Work Report: Assessing Hamilton's Employment Disparities During COVID-19 https://bluetoad.com/publication/?m=66690&i=717346&p=6&ver=html5

⁵⁹ Statistics Canada, Census 2016

⁶⁰ City of Hamilton, Hamilton Profile - Our Community https://www.arcgis.com/apps/MapSeries/index.html?appid=8d7d72677d844bdd8a7ac-b641e3acd8a

⁶¹ https://infogram.com/copy_2016_home_languages_in_hamilton?utm_source=SPRC+Newsletter&utm_

⁶² http://www.cbc.ca/news/canada/hamilton/hamilton-2016-census-visible-minorities-doubled-1.4383573

⁶³ RBC, COVID Further Clouded the Outlook for Canadian Women at Risk of Disruption (2021) https://thoughtleadership.rbc.com/covid-further-clouded-the-outlook-for-canadian-women-at-risk-of-disruption/?utm_medium=referral&utm_source=media&utm_campaign=special+report

2.4 Growth and Development

As one of Ontario's fastest growing metropolitan areas, Hamilton is the ninth largest in Canada and the third largest in Ontario.⁶⁴ Major growth and development in Hamilton is occurring in former neighbouring municipalities which were amalgamated to form the 'new' City of Hamilton in 2001. Binbrook, Upper Stoney Creek, Waterdown and Winona are all in the suburban/rural areas of Hamilton currently undergoing development or plans for development to accommodate the increasing population.

Hamilton's downtown core is undergoing a revitalization leading to growth in high rise developments and a project to develop Hamilton's west harbour is on the horizon. The expected population forecast for these growth areas are as follows:

Growth Area	2031 Population Forecast	Increase from 2016	Growth %
Binbrook	16,011	5,985	60%
Waterdown	32,067	11,804	58%
Upper Stoney Creek	20,427	15,442	310%
Winona	13,297	9,671	267%
Downtown Hamilton	25,206	12,480	98%
West Harbour	8,419	2,791	50%
Ancaster	26,327	7,305	38%
TOTAL	141,754	65,478	

Source: City of Hamilton, Planning and Economic Development Community Planning-GIS Section, January 7, 2019

By 2031, Hamilton's population is expected to grow to 680,000, or by almost 20%.65

Hamilton will also see development in the Airport Business Park located in the southern portion of the city, on the escarpment east of the Hamilton International Airports. The Airport Employment Growth District is an area designated for employment lands which will help meet the City's needs identified in its growth strategy (GRIDS) to the year 2031. 66 Hamilton's employment is expected to grow from 252,000 jobs in 2016 to 350,000 in 2031.

Growth in Hamilton is also gauged by the amount of construction in the city. In the first half of 2021, Hamilton issued one billion dollars in building permits. This milestone is unprecedented within only six months and marks growth in the residential, commercial, and industrial sectors. Despite the pandemic, investments in Hamilton continue to increase aiding economic recovery.⁶⁸

⁶⁴ City of Hamilton, Planning and Economic Development Dept. Elfrida Growth Area Study Existing Conditions Report

⁶⁵ GRIDS2 Growth Summary 2006-2016

⁶⁶ http://www.investinhamilton.ca/locate-expand/business-parks

⁵⁷ Ibid.

 $^{68\} https://bayobserver.ca/2021/07/13/hamilton-hits-1-billion-building-permit-mark-with-half-a-year-to-go$

The Hamilton Street Railway (HSR) provides bus service within the city while GO Transit provides inter-regional bus and rail services. However, the City of Hamilton and the provincial and federal governments currently have an agreement in place to build a Light Rail Transit (LRT) system to carry passengers between the west and east ends of the city (B-Line). This would eliminate the need for buses along this line. Construction for this project will have an impact on emergency response times since it will occur along central corridors through the lower city which is a main artery used by HPS. It will run through the downtown core, an area with the highest call demand. Furthermore, once construction is complete paramedics will have to learn the right-of-way rules and how to navigate the tracks during an emergency response.

2.5 Transportation Network

As Hamilton is situated roughly midway between Toronto and Niagara Falls it has a strategic position within Ontario's transportation network. Hamilton has two major provincial freeways, Highway 403, Queen Elizabeth Way (QEW) and two municipal expressways, the Lincoln Alexander Parkway, and the Redhill Valley Expressway.

The location of the city enables easy access through a network of highways, international trucking and rail lines, the John C. Munroe International Airport and the Port of Hamilton, the busiest of all Canadian Great Lakes ports. ⁶⁹ As such, Hamilton is a primary gateway in North America for global goods movement which is paramount to the local economy. ⁷⁰ Its location and highway network also makes commuting to a job outside of the city more accessible. In 2016, almost 33% of employed residents travelled outside of Hamilton for work ⁷¹ higher than the 20% provincial average. ⁷²

In 2016, 83% of the Hamilton's employed labour force travelled to work by motor vehicle (either as the driver or a passenger)⁷³ as compared to the provincial average of 79%⁷⁴. Over 10% of the employed population take public transit to their jobs and just under 1% cycle to work.⁷⁵ Hamilton currently has 115 kilometres of designated bike lanes on its streets and 150 kilometres of multi-use trails for cyclists and pedestrians.⁷⁶

With a growing population, increasing density, residents working outside of the city, construction, narrower streets and bike lanes, the city has experienced heightened traffic volume and congestion. This can impede the travel time for the HPS in responding to emergencies. Increased traffic also increases the occurrence of transportation-related incidents on the city streets, highways, bridges, water or on the rail lines that may require emergency response from HPS.

⁶⁹ https://www.hamiltonport.ca/port-facts/history

⁷⁰ https://investinhamilton.ca/industries/goods-movement

⁷¹ City of Hamilton, Hamilton Profile - Our Community https://www.arcgis.com/apps/MapSeries/index.html?appid=8d7d72677d844bdd8a7ac-b641e3acd8a

⁷² https://www.hamiltoncommunityfoundation.ca/vital-signs/getting-around-2018

⁷³ City of Hamilton, Hamilton Profile - Our Community

⁷⁴ https://www.hamiltoncommunityfoundation.ca/vital-signs/getting-around-2018

⁷⁵ City of Hamilton, Hamilton Profile - Our Community

⁷⁶ https://www.hamilton.ca/streets-transportation/biking-cyclists/cycling-infrastructure

2.6 Educational Institutions

Hamilton is home to a number of post-secondary institutions including McMaster University, Mohawk College, Redeemer University College, Brock University satellite campus and Collège Boréal, the only French-language college in Southwestern Ontario.

In addition, Hamilton is home to Columbia International College a university preparatory school and the country's largest boarding school with 1,800 students from over 70 countries.⁷⁷

The existence of various educational institutions in the city presents opportunities for HPS to collaborate in conducting local research. For example, HPS partnered with McMaster University Department of Family Medicine to study the impacts of the MIH's @Clinic Program. HPS has also collaborated with McMaster University students of CityLab to developed solutions to reduce unnecessary 911 calls through effective communication.

The number of post-secondary institutions in Hamilton creates an influx of students during the school term. For example, McMaster University has approximately 30,000⁷⁸ students, of which almost two-thirds come from outside the immediate Hamilton region.⁷⁹ Such an influx of people to the city, combined with events and celebrations held by students has the potential to increase the demand on paramedic services.

2.7 Arts and Culture

Hamilton's arts and culture scene has flourished in recent years. The city has a range of entertainment venues including a 17,500-seat enclosed arena that is home to an OHL hockey club (Hamilton Bulldogs) and national basketball team (Hamilton Honey Badgers) and hosts concerts year-round; a state-of-the-art concert hall with a capacity for over 2,100 people; a 750-seat professional theatre as well as many small community theatres. Hamilton has an outdoor stadium that holds up to 24,000 persons which is home to Hamilton's national sports teams (Hamilton Tiger Cats and Forge FC), and also utilized for concerts and films. There are also numerous smaller venues and clubs that feature live shows.

In addition to the Art Gallery of Hamilton, Hamilton boasts smaller galleries and studios displaying local and international art. Many of these are located in the downtown core along James Street North and are showcased during "Art Crawl" a monthly event when galleries, studios, boutiques, stores, and restaurants stay open late for hundreds of visitors. In addition, "Supercrawl" is the annual festival for which the street is closed to vehicle traffic so hundreds of thousands of people can enjoy the shops and studios in addition to street performers, artisans, and a variety of musical acts. 80

Hamilton has received media attention for its cultural revival and as such has attracted thousands of visitors to the city and its venues, both indoor and outdoor. The ten-year Master Plan must consider the influx of visitors and mass gatherings that could pose health risks for which HPS needs to be equipped to respond with adequate resources.

⁷⁷ https://www.cic-totalcare.com/discover-columbia

⁷⁸ City of Hamilton, Invest in Hamilton http://www.investinhamilton.ca/why-hamilton/universities-colleges

⁷⁹ https://en.wikipedia.org/wiki/Hamilton,_Ontario

⁸⁰ http://supercrawl.ca/news/84-volunteer-for-supercrawl-2018

2.8 Economy

In recent decades Hamilton's economy has become significantly diversified. Moving away from being seen as the steel-producing city, Hamilton is now recognized for its life sciences research, health care, education, and service sectors in addition to advanced manufacturing.

In addition to the thriving arts and culture industry, Hamilton's film industry has also been contributing to the local economy. In 2019, 141 productions were filmed in Hamilton with a self-reported direct spend of \$59.7 million in the city's economy.⁸¹ While the number of films dropped in 2020 due to the pandemic, in the first three months of 2021, 126 filming permits were issued compared to 117 in the first quarter of 2019.⁸²

The movement of goods is paramount to the local economy. The location of the city enables easy access through a network of highways, rail lines, the International Airport, and the Port of Hamilton. Because of an increasing integration of the economy and transportation system between the Greater Toronto Area (GTA) and the City of Hamilton, Hamilton is now considered part of larger GTA region called the GTHA (Greater Toronto and Hamilton Area).

Hamilton's International Airport has seen significant growth in passenger traffic in the last few years. In 2019, the airport served over 955,373 passengers. The airport is Canada's largest overnight express cargo airport with a 21% increase in air cargo distribution since 2016. The airport has recently been recognized as North America's fastest growing airport. The airport is a strong economic driver for the city with over 3,400 people employed either directly or indirectly with the airport and \$1.2 billion of economic output.⁸³

The Port of Hamilton is home to 130 companies that store, process and export diversified cargo such as steel, agricultural and liquids. The Port of Hamilton receives approximately 650 vessel calls per year. Approximately \$3 billion worth of cargo flows through the Port of Hamilton each year. The Port of Hamilton is the largest port in Ontario and the busiest of all Canadian Great Lakes ports. It employs 2,100 people and is one of the City's largest taxpayers.⁸⁴

With Hamilton's unique geography, increasing and aging population, growth and development, social determinants of health, complex transportation network and influx of students and visitors throughout the year, HPS must plan for a growing demand for an increasingly wide range of paramedic services over the coming decade.

⁸¹ Email correspondence Kimberley Adrovez, Film Operations Specialist, City of Hamilton, May 26, 2020 https://www.thespec.com/entertainment/local/2021/03/26/hamilton-filming-2021-tv-productions.html

⁸² https://www.thespec.com/entertainment/local/2021/03/26/hamilton-filming-2021-tv-productions.html

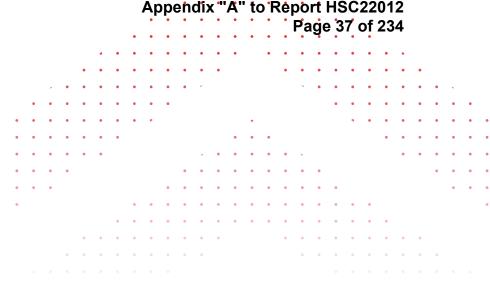
⁸³ https://cdn.flyhamilton.ca/wp-content/uploads/2020/04/HIA-Year-in-Review_Final.pdf

⁸⁴ https://www.hopaports.ca/port-facts/cargo-statistics



HAMILTON PARAMEDIC SERVICE PROFILE





3.1 Historical Context

In the years since the City of Hamilton has had responsibility for the land ambulance services, the service has transitioned from Emergency Medical Services located in the City Manager's Office to the Hamilton Paramedic Service located in the Healthy and Safe Communities Department.

From 2000 to 2010, a number of reviews of HPS have been undertaken by both internal and external parties that highlighted the need to address the growing demand on paramedic services. A series of recommendations were made that were only partially acted upon due to the contingencies and pressures at the time. With increasing call volume and a developing code zero issue, where there is one or no ambulances available for response, HPS faced challenges in meeting service demands.

From 2014 to 2020, excluding 2015, additional resources each year have enabled HPS to keep up with increasing 911 calls. However, the initial deficit identified through the earlier reviews of HPS has not been fully addressed. As a result, HPS continues to be challenged by limited resources that do not adequately address the needs of the community. The details of call demand and response performance are described in Section 4.0 of this Master Plan.

3.2 Overview of HPS

HPS is an integral part of the health care system in Hamilton and contributes to the public safety of the community. HPS helps to promote the health and safety of Hamilton's residents and visitors through prevention, response, and follow-up activities.

Regulations and Standards

HPS must operate in accordance with the regulations and standards set by the MOH through the *Ambulance Act*. Regulations and standards supported by the *Ambulance Act* include:

- Regulations 257/00: General, 129/99: Costs Associated with the Provision of Land Ambulance Services, and 497/07: Land Ambulance Services – Designation
- Land Ambulance Response Time Standard
- Advance Life Support Patient Care Standards
- Ambulance Service Communicable Disease Standard
- Basic Life Support Patient Care Standards
- Provincial Equipment Standards for Ontario Ambulance Services
- Provincial Land Ambulance and Emergency Response Vehicle Standard
- Ontario Ambulance Documentation Standards
- Patient Care and Transportation Standard
- Land Ambulance Certification Standards

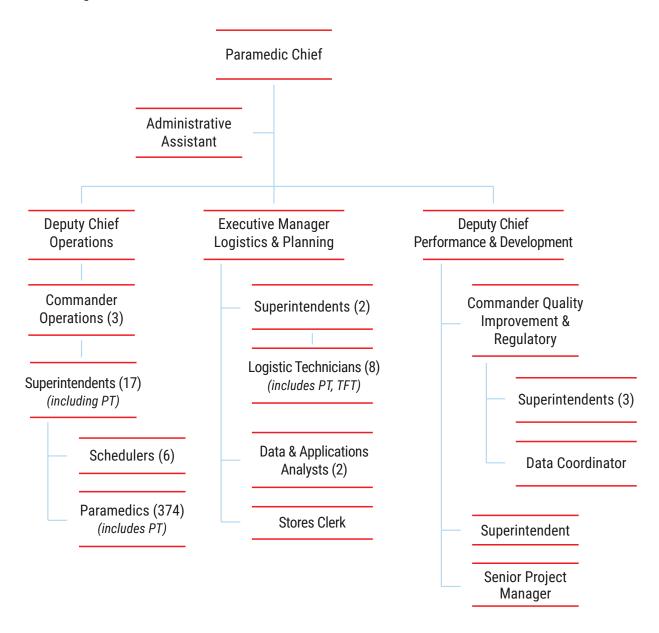
Organizational Structure

As noted earlier, HPS is situated within the Healthy and Safe Communities Department of the City of Hamilton which enables for collaboration with other divisions focused on similar outcomes for the community.

The Paramedic Chief reports to the General Manager of the Healthy and Safe Communities Department and is responsible to lead the planning and operationalization of HPS which is comprised of the following sections:

- Office of the Chief
 - Responsible for strategic vision, direction, and planning
- Operations Section
 - Responsible for providing oversight on matters of deployment and resource utilization
- Logistics and Planning Section
 - Responsible for providing support to all sections through procurement and asset management
- Performance and Development Section
 - Responsible for ensuring regulatory compliance, quality improvement and continuing education and training

The HPS organizational structure is as follows:



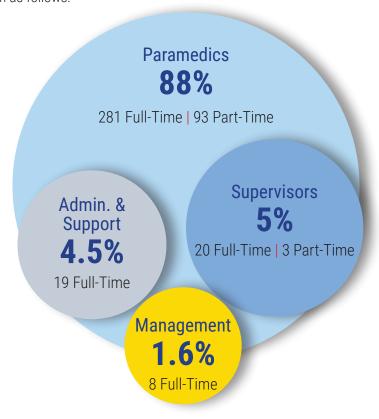
PT= Part-time

TFT= Temporary Full-time

Workforce

HPS employs a total of 424 staff including both full and part time. The HPS workforce is represented by three unions: The Ontario Public Service Employees Union (OPSEU) Local 256 representing paramedics, the Canadian Union of Public Employees (CUPE) Local 1041 representing supervisors and CUPE Local 5167 representing some HPS support staff.

Approximately 88% or 374 staff are paramedics with about 17% of those Advanced Care Paramedics. While paramedics provide direct frontline services to residents and visitors, the supervisors, management, and administration staff provide a variety of supportive and regulatory functions to meet MOH mandates. The workforce breaks down as follows:



Position	Full-time	Part-time
Primary Care Paramedics	226	83
Advanced Care Paramedics	55	10

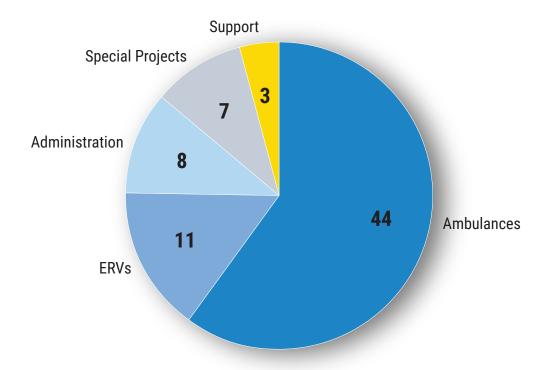
HPS has a considerable portion of its workforce eligible to retire over the course of this Master Plan. As of 2020, approximately 11% of the HPS workforce is qualified for retirement within the next two years. By the end of this ten-year Master Plan in 2030, almost half (46%) of the 2020 workforce will be 51 years and older with many eligible to retire. The loss of seasoned employees means a loss of key experience and skills. Planning for the departure of experienced employees is essential to ensure continuity of operations. HPS must develop a strategy to develop future leaders and prepare employees for advancement. Succession planning is critical for long-term success of HPS.

Infrastructure

HPS operates out of 18 paramedic response stations across the city in both urban and rural areas. All stations are shared with the Hamilton Fire Department (HFD) with the exception of two that are exclusive HPS operations.

HPS has a fleet of 73 vehicles comprised of 44 ambulances, which includes a bariatric unit and a Neonatal Intensive Care Unit transport ambulance that is annually contracted. The fleet also consists of 11 Emergency Response Vehicles (ERVs), four of which are for frontline response with the remainder as spares; three support units including an Emergency Support Unit (ESU), operations trailer and logistics vehicle; eight administrative vehicles and seven special project vehicles utilized by Mobile Integrated Health. During the pandemic, HPS also decommissioned two ambulances to be used temporarily for COVID-19 testing in the community. The breakdown of the fleet is as follows:

Hamilton Paramedic Service Fleet



Recently, HPS has acquired two ambulances outfitted with hybrid regenerative braking technology. With travelling around two million kilometres per year, this technology will reduce greenhouse gas emissions and improve gas mileage of these vehicles. This Master Plan will recommend the development of a plan to further reduce HPS's carbon footprint.

Budget

For 2021, HPS has an overall budget of \$61,040,630. However, as noted earlier, the province provides funding for 50% of these costs. As well, there are some specific programs such as the offload nurse program, the NICU transport ambulance and community paramedicine (know in Hamilton as MIH) that are funded 100% by the MOH. The allocation of funds per each cost category and the percentage of the overall budget is as follows:

Cost Category	\$	%
Employee-related	50,290,900	82
Municipal Recoveries (Exclude Shop Labour)	4,724,750	8
Material and Supply	2,891,020	5
Contractual/Consulting/Financial	1,758,230	3
Vehicle Expenses	1,026,710	2
Building and Ground	349,020	1
TOTAL	61,040,630	100

Note: Percentages rounded to the nearest whole number

HPS achieves cost effectiveness in operating vehicles through partnerships within the City of Hamilton. With corporate fuel purchasing arrangements and utilizing the Hamilton Fire Department vehicle maintenance services, HPS realizes cost efficiencies without jeopardizing quality service. The costs per response in 2020 was as follows:

Response Category 2020	Total
Kilometres Travelled	1,887,557
Cost per Response	\$688.69
Cost of Materials and Supplies per Response	\$28.36
Vehicle Cost per kilometre	\$0.66

Scope of Practice

HPS employs two levels of paramedics, Primary Care Paramedics (PCPs) and Advance Care Paramedics (ACPs). PCPs are graduates of an accredited one- or two-year paramedic program. ACPs have PCP level of training and experience as well as an additional year in a community college post-diploma program. Over 83% of paramedics with HPS are PCPs (including part time).

PCPs are authorized by a physician to perform controlled medical acts that when combined with other medical assessments they can effectively treat the majority of patients' illnesses or injuries. Based on call information provided to the MOH dispatch centre or at the request of a PCP, ACPs respond to perform additional practices to treat more complex medical or traumatic injuries. An outline of the scope of practice for PCPs and ACPs is as follows:

HPS Paramedic S	Scope of Practice
Primary Care Paramedic (PCP)	Advanced Care Paramedic (ACP)
 Medications: Acetaminophen (↓ mild pain) Aspirin (↓ mortality during heart attack) Epinephrine (↓ histamine in severe allergic reaction) Glucagon (↑ blood sugar levels) Ibuprofen (↓ mild pain) Ketorolac (↓ moderate pain) Naloxone (reverse opioid overdose) Nitroglycerine (↑ blood flow during angina) Oxygen Salbutamol (relax muscles in lungs) 	 In addition to PCP medications: Adenosine (↓ heart rate) Atropine (↑ heart rate) Calcium Gluconate (↓ blood potassium levels) Dextrose 50% (↑ blood sugar levels) Dimenhydrinate (↓ nausea/vomiting) Diphenhydramine (↓ moderate allergic reaction) Dopamine (↑ heart rate and blood pressure) Epinephrine (↑ blood flow during sudden cardiac arrest) Lidocaine (↓ irregular heartbeats and "numbing" of tissues) Midazolam (sedation and ↓ seizure activity) Morphine (↓ severe pain) Normal Saline Bolus (↑ blood pressure) Sodium Bicarbonate (↓ acidosis in blood) Phenylephrine (↓ blood flow to tissue)
Procedures: 12 Lead Electrocardiogram (diagnose heart attack) Supraglottic Airway (↑ ventilation/oxygenation) Airway Suctioning (↓ mucous/foreign bodies) Capnometry (evaluation of respiratory system) Continuous Positive Airway Pressure (↓ severe respiratory distress) Defibrillation (eliminate lethal irregular heartbeat) Peripheral Capillary Oxygen Saturation (evaluation of oxygen in blood) Glucometer (evaluate of blood sugar in blood) Emergency Dialysis Disconnect (removal of at home dialysis unit if transport required) Termination of Resuscitation (discontinue resuscitation if determined futile) On-Line Medical Direction (physician consult via phone)	 In addition to PCP procedures: Endotracheal Intubation (↑ ventilation/oxygenation) Tracheal Tube Introducer Device (assist with Endotracheal intubation) Foreign Body Airway Removal (remove object from airway) Central Venous Access Device (fluid or medication administration via arterial line) Intraosseous Therapy (fluid or medication administration via bone marrow) Intravenous Therapy (fluid or medication administration via vein) Needle Thoracotomy (↓ excessive air in lungs) Synchronized Cardioversion (↓ heart rate) Transcutaneous Pacing (↑ heart rate)

Given the additional procedures and medications that ACPs can administer, it would be optimal to have one ACP on every ambulance for every shift as well as expand the scope of practice of PCPs. This would increase capacity to reduce the severity of patient distress and potentially improve patient outcomes.

With the province's introduction of the "Patients First: Action Plan for Healthcare" in 2015, HPS collaborated with a variety of community and health partners to establish the Community Paramedicine Program now called Mobile Integrated Health (MIH). Community Paramedics who deliver these programs are certified PCPs or ACPs and possess additional training focused on chronic health and social determinants of health that may contribute to a resident having to use 911 on multiple occasions.

HPS Mobile Integrated Health Community Paramedics Additional Training		
Community Paramedic	Social Navigator	
 Enhanced primary care assessment skills Chronic disease education and coaching Clinical rotations with local partners Senior citizen neglect and abuse assessment Falls risk and prevention techniques Community Health Assessment Program (CHAP) Aboriginal persons awareness and transition from acute care facilities Health Links awareness and orientation of Congestive Heart Failure (CHF) and Chronic Obstructive Pulmonary Disease (COPD) transitioning from acute care facilities 	 Enhanced mental health and addictions assessment skills Forensic research Acceptance and Commitment Therapy Professional boundaries Give, Take, Care Learning Fetal Alcohol Spectrum Disorders (FASD) and the Law training Mental health first aid 	

Base Hospital

The MOH designated Hamilton Health Sciences (HHS) as the Base Hospital Program for the west region in Ontario which includes Hamilton. HHS Centre for Paramedic Education and Research (CPER) provides Hamilton paramedics with continuing medical education, medical advice relating to pre-hospital care and patient transportation and through the medical director gives paramedics the authority to perform controlled medical acts. As per the *Ambulance Act* the base hospital is also responsible to monitor the quality of care provided by ambulance services and provide quality assurance information and advice.

Paramedics are required to complete a specified number of hours of education and recertification exams annually to maintain their base hospital certification. Furthermore, patient care records are subject to review by the base hospital and HPS to assure appropriate care is provided to patients.



Education and Training

In addition to paramedics receiving mandatory continuing medical education from CPER, they also are required to attend HPS education and training sessions. HPS's Performance and Development Section organizes Professional Development Days sessions twice a year in which paramedics receive a range of instruction delivered by a variety of HPS partners.

During these sessions, paramedics learn about or review such topics as utilizing information systems, accurate record keeping, organizational policies, appropriate use of social media, mental health awareness, correct ergonomics to avoid injuries, proper use of equipment, CPR recertification, understanding and respecting gender diversity and maintaining a positive workplace culture.

The Performance and Development Section of HPS delivers over 10,000 hours of education and training to paramedics every year.

Ambulance Service Review (ASR)

HPS is required to be certified by the MOH to operate land ambulance service. To maintain certification the service must demonstrate compliance to legislation and related standards through a comprehensive review conducted by the MOH every three years. The MOH review team consists of ministry representatives as well as management and paramedic representatives from services throughout Ontario. The team evaluates vehicle, equipment maintenance and cleanliness, quality assurance programs, employee files and credentials, training records and patient care records. The team also conducts ride-outs with paramedics to assess patient care and other paramedic practices. In May 2019, HPS underwent a complete ASR and was found to meet the review certification criteria and legislated requirements for the renewal of certification to operate land ambulance service. Furthermore, the Ministry commended HPS for its efforts in the areas of preparing for the ASR, training, certification of vehicles and quality assurance and continuous quality improvement. HPS is currently beginning preparations for the 2022 ASR.

Dispatch

All ambulance movement in Hamilton is directed by the Central Ambulance Communications Centre (CACC), a service provided by the MOH. The CACC dispatches the closest ambulance available to a 911 medical call. This may mean an ambulance stationed across the city but travelling near the incident will be dispatched. It may also mean an HPS ambulance can be dispatched to a bordering municipality should it be closest to the incident. Similarly, an ambulance from a bordering city could be dispatched to an incident in Hamilton if it is closer or if there are no units available to respond. HPS develops and maintains a deployment plan that is provided to CACC. HPS does not directly control which ambulance is sent to a call or to deployment areas and relies on the CACC to deploy ambulances as per the HPS deployment plan.

Tiered Response Agreement

HPS established a Tiered Response Agreement (TRA) with the Hamilton Fire Department (HFD) in 2000. The agreement defines criteria for the HFD to respond to life-threatening (Code 4) medical calls. Responding to medical calls accounted for over 66% of HFD responses in 2019⁸⁵. As such, the HFD's Service Delivery Plan (2019-2028) identifies the need to review the agreement to ensure that appropriate HFD resources are dispatched relative to patient needs.

However, before a review of the TRA had been completed, the onset of the COVID-19 pandemic in March 2020 resulted in immediate changes to tiered responses. In an effort to preserve personal protective equipment (PPE) and reduce contact, firefighters began responding to the most serious medical calls only, that is, motor vehicle collisions and vital signs absent calls. Other municipalities have also adjusted their TRAs in a similar fashion. This helps to ensure there is an adequate supply of PPE for paramedics and that firefighters are not exposed to potential COVID-19 positive patients unnecessarily.

These temporary changes to the TRA have provided insights into the impacts of a modified agreement. This Master Plan will recommend the TRA update be resumed and take into consideration the outcomes of a modified TRA during the pandemic.

Community Engagement

HPS recognizes the importance of obtaining input from residents and stakeholders to ensure the needs of the community are considered when planning and delivering services. To that end, HPS obtains feedback from the community in a variety of ways (see Appendix A for reports of survey findings).

⁸⁵ City of Hamilton, Service Profiles, Hamilton Fire Department Profile https://spatialsolutions.maps.arcgis.com/apps/MapSeries/index.html?appid=434503288b19472e886ac9f2ac271f48

HPS Citizen Survey

In 2018, HPS conducted a survey to gain a better understanding of residents' expectations and satisfaction levels regarding the services provided by HPS (Appendix A-1). A total of 827 residents responded to the survey. Randomized telephone surveys, representative of Hamilton's population, collected 550 responses. To supplement the telephone data, an online version of the survey posted on the City of Hamilton website garnered 277 responses.

Based on either their experience with or knowledge of HPS, the majority (87%) of phone survey respondents rated services provided by HPS as excellent, very good or good. Approximately 29% of phone respondents called 911 for an ambulance in the past two years for either themselves or a family member.

Respondents' expectations of response time were very different for life-threatening emergencies and non-life-threatening situations. The majority (94%) of phone respondents expect a response time of less than ten minutes for life-threatening emergencies. For emergencies that are not life-threatening, the majority (61%) of phone respondents expect a response time of 11 minutes or more.

The majority (85%) of respondents by phone survey felt it was very important for the paramedic dispatcher to provide care instructions over the phone prior to paramedics' arrival. Moreover, 77% of phone respondents felt that they should be transported to a medical facility determined by paramedics to be most appropriate for their condition rather than to a hospital of their choice. While dispatchers can instruct callers to support administering first aid and CPR, currently dispatch does not employ a clinician to advise, treat or refer callers to practitioners and services. However, this Master Plan will recommend a clinician be installed at dispatch. Since this survey, legislation has been updated enabling paramedics to determine a destination alternate to a hospital and HPS is currently working with hospital partners on guidelines. Both of these practices can contribute to reducing the number of patients taken to the Emergency Department where paramedics are often held up in 'offload delay' until hospital staff assumes care of the patient.

When residents were asked if it would be acceptable for them to be left in the Emergency Department waiting room once paramedics had tended to them, the majority of phone respondents (91%) indicated that this practice was acceptable. The Fit-to-Sit program has been implemented by HPS in collaboration with the hospitals to address the persisting offload delay issue. This program allows paramedics to place some low acuity patients directly into the waiting room so they can return to the community promptly to respond to the next emergency. This program also helps to alleviate offload delay at hospitals experienced by paramedics. The details about offload delays will be examined later in this Plan.

HPS Stakeholder Consultations

To gain insight into the perspectives and needs of key community partners as well as to identify opportunities for further collaboration, HPS consulted with over 30 leaders of key organizations including the hospitals, base hospital, unions, long-term care facilities, Hamilton Public Health Services, MOH (including CACC), police, HFD, and CityHousing Hamilton.

Partners described having a strong, positive relationship with HPS. They identified areas for development or expansion over the coming decade such as:

- Proactive coordinated care (e.g., through MIH activities)
- Alternate care pathway
- Mental health and addiction
- Collaborative response
- Integrated systems (business processes, data, information technology)
- Joint training
- Community partnerships
- Public education
- Diversified paramedic role

Following these consultations, HPS has commenced a number of initiatives in collaboration with community partners such as the development of a profile of ambulance services users and the provision of flu shots through the @Clinic Program with Hamilton Public Health Services. Also, in partnership with long-term care homes, HPS created a new MIH Program in which paramedics treat residents with flu-like symptoms in the residence rather than transporting them to hospital. HPS also provided training to long-term care and Hamilton Public Health Services personnel in respiratory protection. In collaboration with Hamilton General Hospital's Heart Investigation Unit (HIU), paramedics now receive clinical feedback from the HIU on heart attack patients they have treated and transported to the HIU. This assists in enhancing the efficacy of paramedic responses. HPS provides training to Hamilton Police Service for the clinical and technical aspects of administering Naloxone to overdoes patients. Additionally, MIH has recently expanded to include a program in partnership with St. Joseph's Healthcare to support women and men with addictions which enables paramedics to take patients directly to addiction-related facilities rather than to Emergency Departments. Also underway in partnership with Hamilton Public Health Services are plans to deliver Naloxone kits to those in need in the community. This initiative is set to begin in the fall of 2021.

Mobile Integrated Health (MIH) Surveys

MIH, formerly known as the Community Paramedicine Program, delivers episodic and continuing community and home-based health care to vulnerable residents who utilize 911 and hospital services on multiple occasions due to chronic medical and/or social issues. Community Paramedics collaborate with community organizations to support clients where they live, thereby improving their quality of life while reducing the need for hospitalization.

As will be described in detail later, HPS delivers several MIH programs including @Home where a Community Paramedic visits clients in their homes, @Clinic where residents of select seniors' buildings can meet with the Community Paramedic during specified times, and Flu Clinics as part of the @Clinic Program during the flu season to provide influenza immunization to residents.

HPS conducts various surveys to garner feedback from clients of MIH to ensure their needs are fulfilled.

In a 2018 survey, clients of the @Home program who responded to the survey felt the program aided their overall health and well-being (87%) and increased their knowledge of how to maintain or improve their health (92%). All respondents felt better prepared to deal with health concerns in the future and gained information about the health and social services available to them.

The majority of respondents (88%) of the @Clinic program survey conducted in 2018 said they visit the clinic every time or almost every time the Community Paramedic was in their building. Ninety-two percent of respondents said the Community Paramedic taught them how to manage their condition and 4% said they would call 911 to deal with their health concern if the clinic was not in their building. Most of the clients surveyed rated the @Clinic program as excellent (83%).

In 2019 and 2020, pulse surveys of the programs were conducted. Results showed that 94% of respondents rated the @Home Program as excellent in 2020, up from 90% in 2019. Of the @Clinic clients who responded to the survey in 2019, 97% rated the program as excellent. Feedback on the Flu Clinic Program in 2019 showed a 98% satisfaction rate with this service. In 2020, 97% of the respondents highlighted the convenience of having flu shots in their buildings and 50% indicated they would not have been vaccinated had the clinic not been readily available. The vast majority (98%) reported that they would like the Flu Clinic Program to return again in 2021.

Make the right call in non-emergency situations

Make the Right Call





HPS Website

HPS routinely collects feedback from service users through the HPS webpage on the City of Hamilton website. The webpage includes a link to a survey where residents can provide input on their level of satisfaction with HPS services. The feedback helps HPS monitor performance and make improvements to customer service and patient experience.

The HPS webpage also includes a phone number and email address where people can provide feedback about the service they received from HPS. This feedback will often result in the creation of a file to be reviewed by the Commander of Quality Improvement and Regulatory Affairs. In 2020, HPS conducted a review of 60 files where there were concerns about service. Concerns were largely related to clinical practice and professional conduct. Each of these concerns resulted in a comprehensive review to determine ways to improve performance.

A file is also created when positive feedback is received so that the paramedics involved can be formally recognized. In 2020, there were 89 files created based on compliments about the paramedics' performance. 'Sensational Service' pins are delivered to paramedics with a letter from the Chief commending them on their extraordinary compassion, caring and kindness. Paramedics are recognized for not only the quality care they provide to their patients but also for ensuring that patients and their families feel comfortable, safe, and supported in their time of need.

City of Hamilton's Our City Survey

The City Manager's Office conducted a survey in 2019 called the "Our City Survey"86 to gauge residents' level of satisfaction with city services (Appendix A-2). A representative sample of 5,771 respondents was contacted via telephone with an additional 3,374 people completing the survey on the City's website.

Results showed that a large majority of residents are satisfied with the services provided by HPS. In fact, results from the telephone survey showed HPS was one of the top ranked services for resident satisfaction with 91% of respondents indicating that the service is good, very good or excellent.

When asked to describe how Hamilton can achieve its vision of being the best place to raise a child and age successfully some residents indicated the need to invest in HPS to increase the number of ambulances and paramedics.

Over 89% of respondents from the phone survey perceived their health to be excellent, very good or good.

⁸⁶ https://www.hamilton.ca/government-information/trust-and-confidence-report/our-city-survey

Employee Surveys

In the fall of 2017, the City of Hamilton conducted a survey of employees across all City Departments, called the Our People Survey (OPS). The OPS measured employee engagement. Employees' level of engagement affects organizational and work outcomes such as job performance and employee health.

Results for HPS were based on the responses of 141 HPS employees (Appendix A-3). Findings showed an overall engagement score of 55%, an improvement from the 2013 engagement score of 37% based on the results of a similar survey administered to HPS staff only.

During the Professional Development Days sessions in the spring of 2018, HPS staff were surveyed about the OPS results. They confirmed areas for improvement and suggested ways to make advancements. The results of their input informed the development of an action plan aimed at increasing employee engagement. The following are the focus areas of the OPS Action Plan:

- Career Advancement
- Workload/Staffing
- Recognition
- Morale

The City has just recently re-administered this employee survey in September 2021. Once the results have been shared in early 2022, the HPS Action Plan will be updated.

In addition to the City's survey and feedback at Professional Development Days sessions, there are suggestion boxes in stations that give staff the opportunity to provide input, suggestions, and ideas to management on an ongoing basis.

Peer Support Team

One of the ways HPS supports employee morale is through the Peer Support Team. The Peer Support Team, established in 2017, is currently comprised of 19 trained volunteer paramedic members and a mental health professional advisor.

The Peer Support Team responds to their colleagues' needs once they have identified a potential mental health issue. The objectives of the Peer Support Team are to:

- Provide a trained resource for peers to confide in, when faced with occupational and/or personal stressors that affect the person's mental health
- Bridge peers to an appropriate health care institution or health practitioner with the expertise to best assist with the person's challenges

In 2019, feedback about the Peer Support Team was obtained through a survey administered to paramedics. Results showed that all respondents were aware of the service and all respondents who utilized peer support indicated it was helpful. The majority (90%) of respondents reported they would contact the Peer Support Team again for assistance.

3.3 HPS User Profile

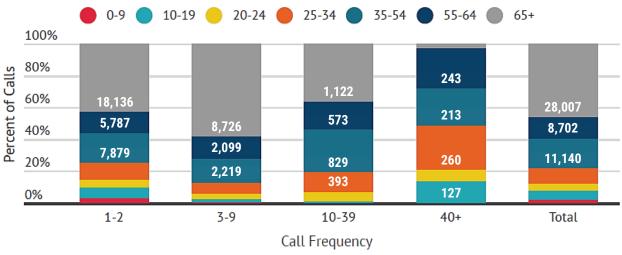
Hamilton Public Health Services conducted an analysis of 2018 patient call records to better understand the characteristics of people who access ambulance services multiple times (Appendix B).

A large portion (45%) of the 61,856 paramedic patients in 2018 were seniors age 65 years and older. Minor trauma was the most frequently reported concern for seniors, as it was for all age groups. Seniors also reported feeling unwell and respiratory problems, which were also common among the youngest patients (age 0 to 9 years).

While seniors made up the highest percentage (45%) of the total call volume in 2018, they made up the smallest portion (3%) of people who called for an ambulance 40 or more times. Seniors did, however, make up the highest portion of people who called between ten and 40 times in the year. Adults age 25 to 34 years were the largest portion (28%) of callers who called 40 times or more. Although youth age ten to 19 years represent only 5% of the call demand overall, they made up 14% of callers who called 40 or more times in 2018. Among the higher frequency callers, the most common issues were related to mental health and addiction. More high frequency callers are picked up by paramedics on the street, later in the day and transported to St. Joseph's hospital in downtown Hamilton.

However, most people (90%) called for an ambulance only one or two times in 2018. Nine percent of people who called 911 called between three and nine times during the year.

Patient Age Group by Call Frequency for All Logged Paramedic Calls with a Patient Interaction, City of Hamilton Paramedic Services 2018



Source: Hamilton Paramedic Service: A User Profile, Hamilton Public Health Services

Overall, the majority of calls (70%) to paramedic services have a return priority of moderate while 9% are very urgent. Fifteen percent of callers refuse to be transported by the ambulance to a hospital. There is a higher proportion of patient refusals among those who call more frequently, from ten to 39 times in the 2018. Common problems among people who refuse transport include 'no complaints,' that is, no obvious injuries were identified when paramedics arrived on scene and falls including lift assists. Mental health and addiction related issues also featured predominantly for higher frequency callers refusing transport.

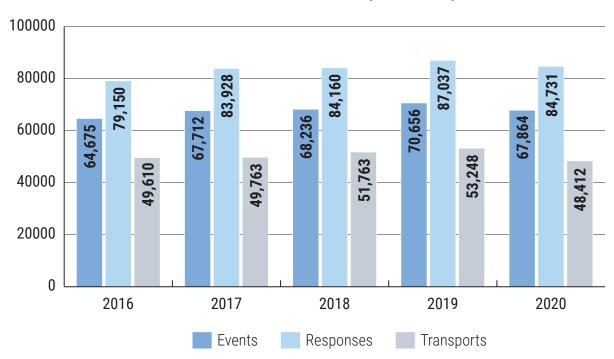
This Master Plan will recommend increasing the capacity to provide services through Mobile Integrated Health for those who most frequently call for an ambulance, particularly seniors and those struggling with substance use.

3.4 Service Demands

Servicing the fifth most populated city in Ontario means HPS is one of the busiest land ambulance services in the province. The demand on service can be demonstrated by the level of activity related to emergency responses. Prior to the pandemic HPS experienced an increase in service demands year-over-year. However, 2020 was a unique year for HPS service demands. It is the first time in many years HPS saw demand for service decrease, albeit marginally and temporarily. Since May 2020, there has been a steady significant increase and HPS is on track for an overall increase in service demand of 3.3% annually as previously forecasted.

The chart below illustrates the demand in service reported by number of events, responses, and transports from 2016 to 2020. Despite the decline in demand during the start of the pandemic, 2020 totals are only slightly below 2019.

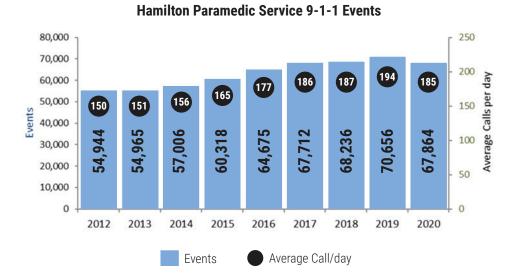
Hamilton Paramedic Service Events, Responses, Transports





Events

An event is generated every time a person calls 911 and requests the assistance of paramedics through CACC dispatch. HPS has seen an upward trend in events by an average of 3.6% each year from 2012 to 2019. In 2019, there was an average of 194 events per day. During the first three months of the pandemic in 2020, there was a daily average of 176 events. However, after May 22 and to the end of December 2020 events had escalated to an average of 222 per day, 14% higher than the 2019 daily average.



In 2020, HPS had a total of 67,864 events, an average of 185 per day. This is slightly lower than in 2019 due to the decline in demand for service during the onset of the pandemic as described above.



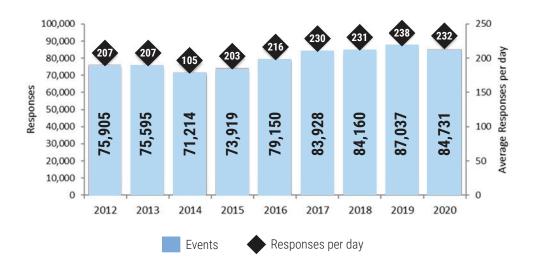
Responses

Responses are the number of paramedic vehicles that are sent to an event. This number is usually higher than the number of events as more than one vehicle is usually required to manage an emergency incident. For example, in the event of a motor vehicle collisions or a complex medical/traumatic emergency, multiple paramedic vehicles may be dispatched to respond.

Coinciding with a decline of 911 events at the beginning of the pandemic was a decline in responses in 2020. Responses decreased by 11% during the period of mid-March through May but rose to an average of 10% above the 2019 average in the latter part of the year.

In 2020, HPS dealt with a total of 84,731 responses with a daily average of 232 responses, slightly below the 2019 daily average of 238.

Hamilton Paramedic Service Responses



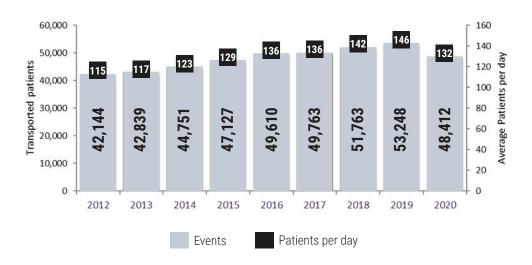
Transports

Transports refers to the number of times patients are transported to hospitals by ambulance. This number is typically lower than the number of events, as some patients decline transport to the hospital or are found not to require hospital services as determined through an assessment conducted by paramedics on scene.

Not surprisingly, the average number of transports to hospitals dipped to 20% below the 2019 average in the first three months of the pandemic. At the end of May 2020 when restrictions were relaxed, the number of transports increased but still remained below the 2019 average by 8%.

HPS carried out a total of 48,412 transports in 2020, with a daily average of 132 transports.

Hamilton Paramedic Service Transports



Response Time Compliance

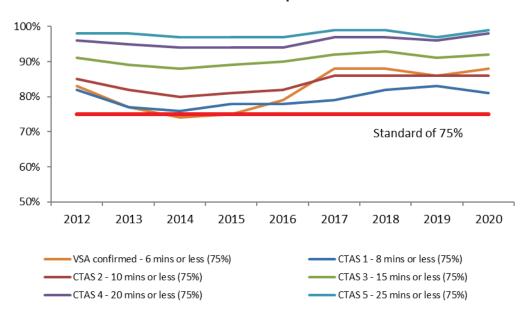
The Ambulance Act of Ontario requires that every paramedic operator in Ontario is responsible to establish and publicly report on response time performance. The City of Hamilton and MOH approved target response times based on the Canadian Triage and Acuity Scale (CTAS). CTAS is a triage system that prioritizes patient care by severity of the injury or illness. HPS is expected to achieve the target times in each CTAS category at least 75% of the time.

In 2020, HPS again surpassed the standard for achieving the target times for each CTAS category.

CTAS Category	Acuity Level	Target Time	Standard % of Time Target Time to be Achieved	% of Time HPS Achieved Target Time
Vital Signs Absent	VSA Confirmed	6 minutes	75	88
1	Resuscitation	8 minutes	75	81
2	Emergent	10 minutes	75	86
3	Urgent	15 minutes	75	92
4	Less Urgent	20 minutes	75	98
5	Non-Urgent	25 minutes	75	99

The graph below shows that as with previous years HPS met and exceeded the response time standards, as indicated by the red line, in each CTAS category again in 2020.





Despite the anomaly of a dip in service demand during the beginning of the pandemic in early 2020, the increase in calls since that time indicates a continuation of the upward trend HPS was experiencing pre-pandemic. With a growing population and an expected sharp increase in the senior population, it is anticipated that the demand for paramedic services will continue to rise over the coming years and decades. Through this Master Plan, HPS must ensure it has the capacity to meet these growing demands.



SYSTEM DRIVERS

OBJECTIVES

- AN ADDITION OF FIVE 12-HOUR SHIFTS AT PEAK DEMAND HOURS, PROVIDING APPROXIMATELY 21,500 ADDITIONAL HOURS OF STAFFED AMBULANCE TIME ARE REQUIRED TO MEET EXISTING SERVICE DEMAND
- AN ADDITION OF ONE AMBULANCE WITH TEN PARAMEDIC STAFF PER YEAR FOR THE NEXT TEN YEARS IS ANTICIPATED TO ADDRESS THE PROJECTED GROWTH IN SERVICE DEMAND

There are several factors that drive the HPS system of service delivery, key among them are people, service demand and service growth. Ensuring that there is an appropriate amount of staff to meet existing and future service demands is imperative for optimal performance.

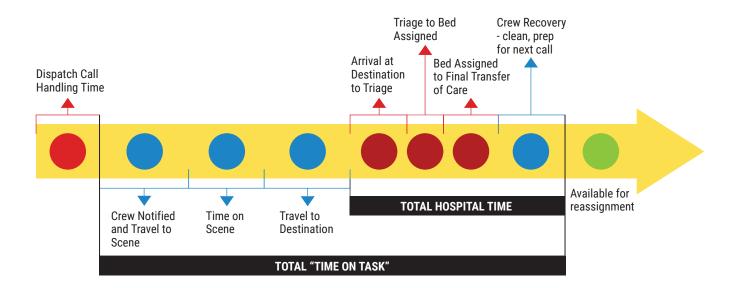
4.1 Current Demand

There are several basic principles that go into creating analysis of the staffing levels required to meet the demand for services. All of these need to be considered in combination with each other to adequately project the most appropriate staffing levels.

Aside from the very important people issues that arise from working in a stressful profession with unpredictable workload, there are two fundamental issues. Irrespective of resource placement issues, the primary variables involved in determining capacity requirements at a systems level are two-fold:

- 1. How many ambulance responses are required (demand); and
- 2. How long each response should take to complete (Time on Task, or ToT).

ToT is represented below and refers to the time when the paramedics are notified of a response, through to the time they are available for reassignment.



Principle 1: Demand multiplied by ToT = staffed ambulance hours required.

Modifying Principle 1, if there is a 12-hour shift, with exactly six responses required, each response taking exactly two hours, all of the responses equally spaced in time and only the total ToT matters rather than the individual time elements in the above figure, in theory one staffed ambulance for 12 hours could handle all of the responses in a timely manner. That is, as long as no one requires a meal, training, vehicle and equipment checks, vehicle and equipment cleaning, report writing, decompression from call activities and other non-response activity. The reality is that "non-response" activities are required and essential to delivering quality service.

Principle 2: Combined Time on Task for responses cannot consume the entire staffed shift as there are other non-response activities required.

Again, modifying Principle 1, ToT varies from call to call. Some calls will be cancelled prior to arrival at the scene. The distance, and therefore the travel time, to scene varies. Some calls are cancelled on scene and are therefore shorter. Some calls are longer on scene due to scene complexity and required procedures. Travel time to hospital varies dependent on which hospital the patient needs to be transported to and the variable distance to that hospital. The time required to transfer the care of the patient to hospital staff also varies. Additionally, the time to conduct an immediate readiness of equipment to respond to the next call prior to departing hospital varies dependent on what equipment was used and what immediate post-call cleaning is required.

Analysis of actual experienced ToT by hour of day, and day of week, demonstrates that it varies significantly across the hours of the day and the days of the week. For example, there were 1,248 discrete hour-long periods evaluated for 52 Mondays that occurred in 2019 (Appendix C-1). Analysis of the ToT by hour of day for the 12,006 responses performed shows significant variation across the hours of the day and the weeks of the year. While the average ToT across the 1,248 periods was 1.28 hours, the longest ToT during a single hour period was 4.22 hours occurring on the ninth Monday of the year between the hours of 2:00 and 3:00 a.m.

Similar time on task ToT analysis was performed by day of week and hour of day for all responses in 2018, 2019, and most recently the unique pandemic year of 2020. Including statistical analysis of the ToT to determine the average, the third quartile, the 90th percentile, and the 95th percentile by hour of day and day of week.

Principle 3: Time on Task predictably varies by hour of day and day of week, and that variance has to be included in the formula for calculating the required staffed ambulance hours to meet demand.

Heat mapping of the ToT by hour of day and day of week at the average, third quartile, and 90th percentile, demonstrates some predictability in the patterns. From a resource allocation perspective, ToT tends to be lower in the late evening and early morning hours and peaks significantly from mid-morning through early evening hours.

2019 Time On	Task																								
	90% TOT	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mondays	90% TOT	1.88	1.64	1.75	1.64	162	1.48	1.74	1.92	1.93	2.15	2.16	2.54	2.69	2.63	2.59	2.50	2.32	2.25	2.33	2.51	2.28	2.02	2.05	2.04
Tue sdays	90% TOT	1.89	1.69	1.74	1.73	1.62	1.60	1.00	1.94	1.94	2.24	2.63	3.19	3.31	3.46	3.32	3.19	3.32	2.87	2.57	2.99	2.65	2.37	2.49	2.18
We dne sd ays	90% TOT	1.95	2.05	2.07	1.86	1.82	1.52	1.74	2.02	2.24	2.47	2.99	3.12	3.59	3.45	3.34	3.32	2.90	2.55	2.42	2.46	2.26	2.36	2.17	2.05
Thuis days	90% TOT	1.72	1.85	1.88	1.75	187	1.63	1.00	1.83	1.94	2.20	2.36	2.62	2.83	3.05	2.94	2.85	2.63	2.48	2.40	2.35	2.18	2.23	2.10	1.90
Fri days	90% TOT	1.74	1.81	1.70	1.62	1.75	1.54	1.70	1.95	1.99	2.32	2.48	2.70	2.80	3.09	3.14	2.92	2.65	2.63	2.53	2.77	2.45	2.35	2.19	2.12
Saturdays	90% TOT	1.93	1.65	1.84	1.70	1.74	1.61	1.67	1.82	1.86	2.10	2.57	2.74	2.80	2.94	3.09	2.93	2.69	2.49	2.36	2.59	2.31	2.27	2.14	2.06
Sun days	90% TOT	1.97	1.88	1.83	1.69	180	1.61	1.61	1.82	2.01	2.03	2.09	2.24	2.46	2.33	2.24	2.50	2.19	1.98	2.06	2.17	1.92	1.94	2.01	1.92
	3rd Quartile	0	1	2	3	4	5	- 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mondays	3rd Quartile	1.41	1.37	1.32	1.36	1.31	1.21	1.33	1.51	1.59	1.62	1.60	1.71	1.75	1.82	1.88	1.83	1.76	1.60	1.62	1.62	1.57	1.44	1.42	1.46
Tue sdays	3rd Quartile	1.39	1.28	1.36	1.32	1.42	1.32	1.33	1.52	1.56	1.68	1.77	2.04	2.02	2.19	2.23	2.05	2.13	1.79	1.67	1.86	1.64	1.65	1.63	1.60
	3rd Quartile	1.47	1.47	1.49	1.43	1.43	1.22	1.37	1.53	1.66	1.69	1.93	2.01	2.23	2.17	2.18	2.14	1.98	1.74	1.71	1.77	1.60	1.55	1.54	1.48
Thuis days	3rd Quartile	1.34	1.45	1.47	1.35	1.46	1.30	1.31	1.50	1.58	1.64	1.68	1.79	1.92	2.00	1.95	1.95	1.99	1.67	1.66	1.61	1.57	1.54	1.57	1.44
Fri days	3rd Quartile	1.39	1.40	1.36	1.29	136	1.26	1.39	1.55	1.57	1.69	1.71	1.91	1.88	1.90	2.16	2.02	1.86	1.80	1.63	1.76	1.64	1.58	1.62	1.58
Saturdays	3rd Quartile	1.42	1.34	1.38	1.33	1.37	1.28	1. Z5	1.45	1.50	1.63	1.75	1.89	1.85	1.97	2.05	199	1.94	1.70	1.70	1.75	1.60	1.54	1.51	1.50
Sun days	3rd Quartile	1.52	1.41	1.33	1.34	1.51	1.29	1.25	1.45	1.51	1.62	1.57	1.64	1.63	1.74	1.73	1.73	1.67	1.55	1.51	1.61	1.48	1.48	1.52	1.46
	Ave rage	0		-	3	4	5	- 5	-	8	9	10	11	12	13	14	15	16	17	18	29	20	21	22	23
Mondays	Average	1.06	0.96	0.96	0.97	1.00	0.96	0.91	1.12	1.18	1.22	1.20	1.30	1.33	1.34	1.38	138	1.26	1.20	1.17	1.23	1.25	1.08	1.09	1.11
Tue sdays	Average	1.05	0.97	1.15	1.03	1.13	0.99	0.94	1.15	1.16	1.32	1.36	1.49	1.49	1.63	1.58	1.49	1.60	1.36	1.18	1.34	1.27	1.72	1.20	1.22
We dne sdays	Average	1.10	1.12	1.16	1.10	1.14	0.95	0.98	1.16	1.26	1.34	1.47	1.49	1.62	1.58	1.55	152	1.42	1.27	1.20	1.27	1.19	1.20	1.13	1.17
Thurs days	Average	0.98	1.08	1.09	1.03	1.13	1.03	0.95	1.04	1.19	1.31	1.27	1.31	1.40	1.46	1.42	1.40	1.39	1.24	1.22	1.18	1.19	1.18	1.16	1.07
Fri days	Average	1.04	1.09	1.09	1.01	1.04	0.98	0.94	1.16	1.13	1.26	1.32	1.38	1.44	1.45	1.56	1.45	1.37	1.33	1.19	1.32	1.23	1.20	1.23	1.13
Saturdays	Average	1.17	1.01	1.02	1.07	1.04	0.95	0.90	1.06	1.14	1.21	1.37	1.43	1.38	1.49	1.47	1.43	1.39	1.25	1.23	1.26	1.21	1.20	1.09	1.12
Sun days	Average	1.05	1.04	1.01	1.00	1.14	1.03	0.87	1.11	1.18	1.24	1.16	1.26	1.24	1.24	1.27	133	1.21	1.14	1.08	1.16	1.13	1.12	1.12	1.03
our usy o	ATT MAKE	2.0.3	2.04	2.02	2.00	227	2.00	0.0	4.44	2.20	2.24	2.20	1.10	2.27	2.27	2.27	233	2.22	2.24	2.00	2.20	2.22	2.22	4.44	2.0.2

Principle 4: Use of a statistical measure of Time on Task matched to the experienced responses and expected growth and matched to shift patterns is required.

The Principle 1 formula includes two factors: ToT and responses. Analysis demonstrates that response volume varies from day to day, from hour to hour, and from week to week due to fluctuating demand. Some days have more motor vehicle accidents. Ice storms cause more falls. Heat waves cause more heat-related health problems. Events like the 2020 pandemic can cause less demand due to people's fear of going to hospital which occurred at the onset, or it can increase demand due to anxiety or delayed care which occurred in subsequent waves of the pandemic.

The number of responses performed was reviewed by hour of day and day of week for the calendar years 2013 through 2020. Appendix C-2 shows a representative sample of calls by hour of day for each day of the week for the 2019 fiscal year.

Analysis of actual experienced response volume by hour of day demonstrates that it varies significantly across the hours of the day and the days of the week. Using the same Mondays in 2019 time period example, there were 1,248 discrete hour periods evaluated for the 52 Mondays in 2019 (Appendix C-3).

For the 12,006 responses performed on Mondays in 2019 there was significant variation across the hours of the day and the weeks of the year. While the average number of responses across the entire 1.248 hours in the period was 9.6 per hour there were some hours with as few as one response and some hours with as many as 29. Similarly, while the average number of responses in a 24-hour period was 231, there were days with as few as 181 responses and days with as many as 282 responses.

Similar patterns and ranges of experienced response volumes are demonstrated for all of the years 2013 through 2020.

Principle 5: Responses predictably vary by hour of day and day of week, and that variance has to be included in the formula for calculating the required staffed ambulance hours to meet demand.

Heat mapping of responses by hour of day and day of week for 2019 demonstrates a pattern similar to the pattern shown for ToT. The maximum number of experienced responses per hour was lower during the late evening and early morning hours and higher through the later morning, afternoon, and evening hours.

Heat mapping of the maximum number of responses in 2019 for each hour period, by day of week, is provided below. Similar heat mapping for the years 2013 through 2020 is provided as Appendix C-4 with the same basic pattern demonstrated.

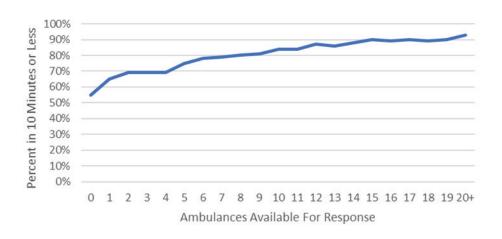
Maximum Responses	by Hour of	fDay																						
2019 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Mondays	16	11	15	14	9	10	19	18	22	22	25	22	29	27	30	23	23	22	26	26	29	20	22	15
Tuesdays	17	12	10	12	9	10	14	15	19	24	23	28	23	24	21	23	23	24	26	22	16	20	23	16
Wednesdays	16	12	12	14	10	16	14	16	21	22	28	25	24	27	27	28	24	22	18	27	20	16	18	17
Thursdays	14	11	13	10	10	10	14	19	24	24	20	22	21	25	23	24	25	32	22	22	23	19	20	18
Fridays	15	14	15	12	14	8	13	14	21	26	23	22	32	24	25	27	27	31	25	29	19	23	22	23
Saturdays	23	16	15	17	14	9	13	14	14	18	24	20	25	26	25	19	20	21	25	25	23	17	21	15
Sundays	16	18	16	14	10	9	17	15	17	19	25	19	25	22	23	18	24	23	33	18	19	25	21	19

Statistical measures were made for each day of the week including the number of responses at the 90th percentile and the 95th percentile. While use of a third quartile measure was considered it was rejected as it would result in very regular and predictable unavailability of ambulances for response.

Principle 6: Use of a statistical measure of Response Demand matched to the experienced responses and expected growth and matched to shift patterns is required.

Over the period 2013 through 2020 and carrying forward into 2021, HPS regularly experienced periods with few to no ambulances available to respond to demand. When this occurs, there is a demonstrable increase in response times to calls assessed by the dispatch as life-threatening or urgent. Utilizing diagnostic software developed by Darkhorse Analytics demonstrates that for the pre-pandemic year of 2019 when there were four or less ambulances available, the response times to calls assessed and dispatched as life-threatening emergencies were lengthened by more than three minutes and for less urgent calls for much longer time periods.

Response Time 10 minutes or less correlated to number of Ambulances available



Darkhorse Analytics has been used to evaluate not only the spatial and temporal aspects of call demand using the MOH provided ambulance dispatch data, but it has added an additional layer of complexity in being able to analyze system performance by time of day, day of week, call complexity as dispatched and as assessed by the responding paramedic, and by the number of ambulances available for response at the time of dispatch.

Sample extracts for 2018, 2019, and 2020 are attached at Appendix C-5 demonstrating the relationship between vehicle availability to emergency call response time with the additional parameters of time of day and day of week.

The chart below, using data for 2019 from Darkhorse Analytics summarizes the increased response time for Code 4 or life-threatening calls with a decrease in the number of available ambulances. In addition to the data for HPS ambulances the data also includes analysis of the response times for out of town ambulances assigned by the MOH CACC to emergency calls within the City of Hamilton which typically occurs during periods of narrowed resources.

First	Other	Ha	amilton Param	edic Service R	esponse – Coc	le 4
Arriving Ambulance (T2-T4)	Ambulance Service Response in Hamilton	Rechange		5 to 9 Ambulances Available	10 to 14 Ambulances Available	15 or more Ambulances Available
90th % Time (Min-Sec)	13:50	11:15	13:44	11:56	10:51	10:01
% of all Code 4 Responses (n=48,749)		92.4%	6.2%	24.5%	44.6%	17.1%

With existing staffing levels, HPS currently experiences a narrowing of resources causing risk of adverse events due to delayed responses. Choosing statistical measures for response demand and ToT to determine required staffing levels cannot result in less staffing hours than currently exist.

Principle 7: Required staffing calculations cannot result in levels of staffing that will result in levels of performance lower than those currently experienced.

Calculations of required staffed unit hours were performed for the various combinations of the statistical measures of both responses and ToT. Response measures of the average and third quartile of hourly responses were discounted as they would result in significant shortages of available ambulances given the actual experienced volumes.

2020 was a volatile year as a result of responding to the pandemic and changes performance. Thus, 2019 prepandemic experienced response volumes and ToT were utilized to avoid skewing longer term projections. A number of measures were used for calculation of required hours, which included:

- a. The maximum experienced responses x the 90th percentile ToT
- b. The maximum experienced responses x the third quartile ToT
- c. The maximum experienced responses x the average ToT
- d. The 95th percentile experienced responses x the 90th percentile ToT
- e. The 95th percentile experienced responses x the third quartile ToT
- f. The 95th percentile experienced responses x the average ToT
- g. The 90th percentile experienced responses x the 90th percentile ToT
- h. The 90th percentile experienced responses x the third quartile ToT
- i. The 90th percentile experienced responses x the average ToT

Following Principle 7 that calculated levels of staffing cannot result in levels of performance lower than currently experienced, measures c, f, h, and i (highlighted in red) were discarded following evaluation results.

The ToT adjusted response volume for 2019 was created for each hour of the day and for each day of the week through multiplication of the actual experienced volume by the actual experienced ToT for that specific hour. The actual measures for the day of week and hour of day are reflected in Appendix C-6.

The resultant calculations for the measures listed above which do not result in staffing levels lower than are already in place are provided in Appendix C-7.

Performing retrospective evaluation of the potential model results the minimum recommended increase in staffing to meet hourly response demand as modified by the actual ToT. The resultant calculations for the response and ToT measures are reflected in Appendix C-8.

Recognizing there will be times during the year where response volume will be lower than average, average, or higher than average, and similarly the ToT will be lower than, at or above average, the ability to predict the exact matching is not precise. Experience, patterns, and retrospective application of the preferred staffing calculation conclusion to validate the choice is required.

Comparison of the results of the remaining statistical models with the experienced 2019 actual volumes and ToT and the 2020 approved staffing pattern (which is one 24-hour ambulance more than the 2019 staffing pattern) indicates that for the 2019 calendar year the minimum recommended level of staffed ambulance hours would be the model reflective of the 95th percentile of demand and the third quartile of ToT.

95th Percer	95th Percentile x3rd Quartile Time on Task																							
2019 Calendar	00.01	01.02	02.03	03.04	04.05	05.06	06.07	07.08	08.09	09.10	10.11	11.12	12.13	13.14	14.15	15.16	16.17	17.18	18.19	19.20	20.21	21.22	22.23	23.24
Mondays	18.5	13.9	14.3	15.1	10.2	10.8	19.9	20.8	26.0	33.9	36.2	34.1	41.7	39.5	40.1	40.5	33.5	32.7	36.7	32.4	33.3	26.7	25.6	19.5
Tuesdays	20.0	13.5	13.0	12.4	13.1	11.2	16.1	19.7	26.4	35.0	41.8	48.3	45.7	48.7	43.8	43.9	45.1	37.6	36.1	37.4	25.6	29.3	29.3	22.7
Wednesdays	17.6	16.4	15.9	13.1	12.1	12.8	16.7	21.0	28.8	32.2	43.3	45.2	52.3	45.4	52.3	52.3	40.7	36.2	30.7	37.7	27.2	23.5	23.4	21.7
Thursdays	16.7	14.9	15.5	12.0	12.8	11.5	15.3	23.1	29.9	35.8	31.8	37.8	40.0	43.8	40.2	44.6	40.5	38.5	34.9	31.9	30.2	27.2	26.0	21.3
Fridays	17.0	17.5	14.9	12.5	12.1	10.6	15.8	22.3	27.2	34.9	36.5	40.8	44.4	38.6	46.6	46.1	38.2	42.9	33.1	39.8	28.2	28.6	30.0	26.8
Saturdays	23.9	19.2	20.3	17.1	13.8	10.5	14.5	20.1	21.3	26.0	32.3	33.7	39.6	45.1	40.1	37.2	37.2	33.8	38.4	36.1	29.8	26.9	27.1	21.0
Sundays	23.4	20.0	18.9	17.2	15.2	11.1	18.4	19.7	22.4	27.6	30.9	29.8	36.1	37.1	37.3	31.4	29.5	31.0	37.0	28.0	27.2	29.0	26.0	19.7

Meeting the unit hours calculated by this model would require approximately 21,500 additional staffed ambulance hours, the equivalent of five 12-hour shifts, 7 days a week, 52 weeks of the year. Thus, it is the objective of this Master Plan that five additional 12-hour shifts, focused on peak demand hours and providing approximately 21,500 hours of additional staffed ambulance time, are required to meet existing demand. This will require 2.5 ambulances that can operate 24 hours a day plus an additional 25 paramedics to fill these shifts. While this is an immediate need, a staged-in approach will be explored in which an additional ambulance per year for three years is implemented.

The analysis and objective from statistical data is supported by the Darkhorse Analytics Diagnostics Analyzer and the Deployment Analyzer tools. Using information in these programs for the years 2018, 2019 and 2020 demonstrates that approximately 84% of all Code 4 calls are responded to within ten minutes which has been the Hamilton benchmark since the 2000 assumption of responsibility for land ambulance service delivery.

In addition to providing response time analysis at a macro level the tool further provides the ability to segment the data by geographical area including analysis at a Ward level. Not surprisingly there are variances by Ward (Appendix C-9) due to density, population, distances, and demographics and these can be summarized in the table below.

Overgoal Calls (>10 Minutes) - Number and Percent of Total Code 4

		2018			2019			2020	
	Overgoal	Total C4	Percent in Goal	Overgoal	Total C4	Percent in Goal	Overgoal	Total C4	Percent in Goal
Ward 1	512	3,164	83.8%	485	3,130	84.5%	446	2,849	84.3%
Ward 2	559	7,231	92.3%	578	7,277	92.1%	622	6,944	90.0%
Ward 3	582	6,814	91.5%	680	6,948	90.2%	571	6,857	91.7%
Ward 4	666	3,588	81.4%	717	3,652	80.4%	618	3,601	82.8%
Ward 5	713	4,103	82.6%	671	4,004	83.2%	629	3,828	83.6%
Ward 6	292	2,230	86.9%	238	2,433	90.2%	231	2,472	90.7%
Ward 7	434	4,018	89.2%	382	4,083	90.6%	339	3,676	90.8%
Ward 8	424	2,573	83.5%	388	2,676	85.5%	385	2,573	85.0%
Ward 9	427	1,427	70.1%	471	1,529	69.2%	505	1,551	67.4%
Ward 10	404	2,112	80.9%	420	2,200	80.9%	371	2,080	82.2%
Ward 11	329	1,166	71.8%	367	1,253	70.7%	382	1,226	68.8%
Ward 12	438	1,872	76.6%	560	2,103	73.4%	485	1,983	75.5%
Ward 13	674	2,348	71.3%	658	2,247	70.7%	658	2,276	71.1%
Ward 14	449	2,055	78.2%	450	2,175	79.3%	393	2,083	81.1%
Ward 15	261	1,117	76.6%	228	1,134	79.9%	249	1,082	77.0%
TOTAL	7,164	45,818	84.4%	7,293	46,844	84.4%	6,884	45,081	84.7%

Source: Darkhourse Performance Analyzer

While staffing and resource increases in 2018, 2019 and 2020 clearly maintained the system performance in the face of increasing call demands there were no overall system improvements demonstrated. To generate system improvements, additional resources allocated in the best locations are required. Over the 2018 to 2020 period 6,800 to 7,300 calls – an average of 18 to 20 per day – that were dispatched as life-threatening emergency calls had an ambulance response time greater than ten minutes.

Utilizing the Darkhorse Deployment Analyzer, with adjustment based on the actual improved performance experienced as result of dynamic deployment rather than the simple station based deployment possible in the Darkhorse tool, the addition of five ambulances (12-hour shifts) combined with redeployment of existing resources to areas with lesser performance should result in an overall improvement of 5% in system performance. This 5% improvement would bring the combined system performance for the city for having an ambulance resource on scene for calls dispatched as life-threatening emergencies to ten minutes 90% of the time (Appendix C-10).

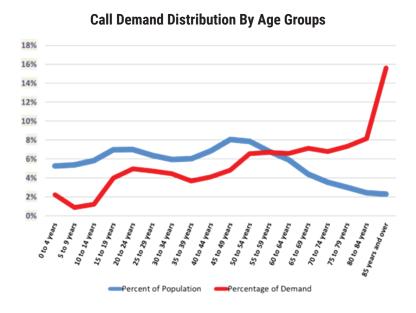
At a more detailed level the modeling shows the most significant improvements can be expected in Wards 4, 5, 8, 9, 10, 11, 14, and 15.

4.2 Projected Demand

Apart from the recommended staffing increases to appropriately meet existing demand there is a need to project demand increases as the served population increases and the demographics shift.

Utilization of, and reliance on, ambulance service is related to the age of the population. While the percent of Hamilton population above the age of 65 is just under 20%⁸⁷ that population accounted for 46% of all patients transported to hospital by ambulance in 2019.

Hamilton's population in general and the portion of Hamilton's population above the age of 65 are both projected to increase over the next 10 years.



⁸⁷ Statistics Canada https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CS-D&Code1=3525005&Geo2=CD&Code2=3525&SearchText=hamilton&SearchType=Begins&SearchPR=01&B1=All&TABID=1&type=0

Response volume and demand for service has increased at an average rate of 3.3% per year over the period 2014 through the current 2021 year-end projection. While the 2020 pandemic year saw significant fluctuations through the year, including major declines in the months of March, April, May, and June the remaining months saw increases.

Actual response volume was projected forward over a 10-year period, utilizing the lowest average increase per year (2.6%), the average increase per year (3.3%), and the highest average increase per year (5.4%).

180,000 152,704 160,000 140,000 124,637 120,000 116,859 100,000 80,000 60,000 40,000 20,000 0 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 Actual Response Volume Average Projection Low Projection

Actual Response Volume 2014 through 2021 with Average, Low, and High Projected Growth

Using the low, average, and high projections, an average annual response increase in the low range of 2,600 (average increase of 7 responses per day) and in the high range of 6,220 (an average increase of 17 response per day) can be anticipated.

To keep pace with the projected increases in response volume at the low to average projection levels, 24 hours of additional ambulance staffing each year for the next 10 years is required.

Darkhorse Analytics provides a similar view of the potential increases. In their analysis, and development of the projected Incident or Event volumes in 2031 they have linked currently planned development in the City of Hamilton, known planned road network changes, and the anticipated demographic shifts in the population.

This approach differs slightly from the HPS statistical analysis projected through to 2031 using the number of responses. This analysis is based on the understanding that there is often a need to respond with more than one ambulance to an event. Incidents involving more than one patient or where there is a significant complexity to the call require additional paramedic attendance. The ratio of responses to events over the last several years has been in the area of 1.2 responses per event. While the Darkhorse Analytics projection is for an increase in events of over 8% per year, the HPS review suggests continuing to plan for our annual statistical average increase with annual review.

In the Darkhorse Analytics projection, the growth in demand by geographic area, and the impact by ward, is clearly demonstrated in the maps attached as Appendix C-11. Significant increases in demand will be experienced in all Wards in the city, with the highest levels experienced in Wards 1, 9, 10, 11, and 15.

Incidents (Events)

	2018	2019	2020	2031 Projection	2020-203	1 Change
Ward 1	3,566	3,583	3,509	8,919	5,410	154%
Ward 2	8,595	8,722	8,422	14,115	5,692	68%
Ward 3	7,852	8,081	8,149	12,864	4,715	58%
Ward 4	4,856	4,914	4,919	7,398	2,479	50%
Ward 5	6,433	6,343	6,241	8,925	2,685	43%
Ward 6	2,912	3,264	3,351	4,928	1,577	47%
Ward 7	4,526	4,847	4,436	7,192	2,756	62%
Ward 8	3,380	3,490	3,363	5,143	1,779	53%
Ward 9	1,586	1,846	1,844	6,885	5,041	273%
Ward 10	2,544	2,733	2,653	6,328	3,675	139%
Ward 11	1,755	1,714	1,706	8,095	6,389	374%
Ward 12	2,351	2,521	2,392	4,162	1,770	74%
Ward 13	2,725	2,704	2,813	5,054	2,242	80%
Ward 14	2,446	2,636	2,482	4,058	1,576	63%
Ward 15	1,202	1,269	1,215	5,261	4,046	333%
TOTALS	58,746	60,688	59,514	109,327	51,832	87%

Source: Darkhourse Deployment Analyzer

With no additional staff over and above the 2020 Council approved staffing levels, the Darkhorse Analytics projections, based on the anticipated 2031 service demand levels, would see a decrease in levels of performance, as measured by the number of life-threatening calls with a paramedic resource on scene in 10 minutes or less.

Without additional resources to the 2020 staffing pattern, with the projected growth through to 2031, there would be more calls taking more than 10 minutes to get an ambulance on scene, an overall decrease in performance of 15%. As demonstrated in the tables below all Wards would be impacted with the most significant impacts being in Wards 1, 5, 9, 10, 11, and 15.

Overgoal Calls (>10 minutes)

	2018	2019	2020	2031 Projection	2020-203	1 Change
Ward 1	907	919	909	3,149	2,240	247%
Ward 2	1,003	1,029	949	2,389	1,441	152%
Ward 3	1,207	1,262	1,259	2,616	1,357	108%
Ward 4	1,745	1,784	1,720	3,532	1,813	105%
Ward 5	2,384	2,397	2,269	4,608	2,339	103%
Ward 6	660	770	755	1,733	978	129%
Ward 7	861	976	833	1,967	1,135	136%
Ward 8	942	1,012	942	1,769	826	88%
Ward 9	842	1,006	1,006	5,520	4,514	449%
Ward 10	1,173	1,251	1,195	4,417	3,222	270%
Ward 11	962	917	979	6,179	5,200	531%
Ward 12	1,132	1,259	1,138	2,376	1,238	109%
Ward 13	1,190	1,186	1,181	2,841	1,660	140%
Ward 14	863	954	855	1,885	1,030	120%
Ward 15	657	688	644	3,525	2,881	447%
TOTALS	18,546	19,428	18,654	48,508	31,874	171%

Source: Darkhourse Deployment Analyzer

Performance <10 minutes

	2018	2019	2020	2031 Projection	2020-203	1 Change
Ward 1	75%	74%	74%	65%	-9%	-13%
Ward 2	88%	88%	89%	83%	-6%	-6%
Ward 3	85%	84%	85%	80%	-5%	-6%
Ward 4	64%	64%	65%	52%	-13%	-20%
Ward 5	63%	62%	64%	48%	-15%	-24%
Ward 6	77%	76%	77%	65%	-13%	-16
Ward 7	81%	80%	81%	73%	-9%	-11%
Ward 8	72%	71%	72%	66%	-6%	-9%
Ward 9	47%	46%	45%	20%	-26%	-56%
Ward 10	54%	54%	55%	30%	-25%	-45%
Ward 11	45%	47%	43%	24%	-19%	-44%
Ward 12	52%	50%	52%	43%	-9%	-18%
Ward 13	56%	56%	58%	44%	-14%	-24%
Ward 14	65%	64%	66%	54%	-12%	-18%
Ward 15	45%	46%	47%	33%	-14%	-30%
TOTALS	71%	70%	71%	56%	-15%	-22%

Source: Darkhourse Deployment Analyzer

However, these projected demand increases may be reduced through the continued implementation of programs such as Community Paramedicine (now referred to as Mobile Integrated Health (MIH) in some services including Hamilton), which are designed to proactively look after clients or patients before exacerbation of illness requires a 911 response. Funding for transformational programs such as this is currently 100% provincial as a health care cost although funding is not permanent. Effective transformation and expansion of Community Paramedicine (or MIH) combined with dispatch reform and implementation of a central clinical hub (described later in this Master Plan) with well-developed clinical pathways, alternative response models and systems integration may reduce the anticipated demand growth curve.

As the impact of alternative programs is not assured and certainly will not be felt immediately, the addition of ambulance resources to meet growth in demand should be anticipated at an additional 24 hours of staffing per year but remain part of the annual budget process.

At the average growth level and the consequent anticipated need for additional annual staffing, there is potential for up to 10 additional ambulances (one per year) and 100 full-time equivalent paramedic staff (10 per year) over the 10-year period of this Master Plan. The growth in response demand can be anticipated to require an additional 8,760 hours of on-site ambulance staffing each year over the next 10 years. This Master Plan therefore recommends that the addition of one ambulance with 10 paramedic staff per year for the next years be anticipated to address the projected growth in service demand

This level of increased resourcing will also necessitate additional ambulance stations to provide space for crews and vehicles and additional logistics support to provide vehicle and equipment readiness, cleaning, and inventory management of supplies. Objectives related to facilities and logistics support are made later in this Master Plan in sections 6.0 and 5.7 respectively.

Annual staffing enhancements will also require additional supervisor time to achieve an ideal span of control that allows for better communication and support of paramedic staff. Furthermore, as the number of paramedic staff increases annually, the need for professional development staff to coordinate and conduct mandatory training will need to increase.

The need for additional supervisory and support staff such as professional development staff will be reviewed annually as part of the annual operating and capital budget process.



SYSTEM OPTIMIZATION

There are a number of ways that the HPS can optimize a system of service delivery to ensure the provision of timely, effective, and efficient high-quality services to people in Hamilton. This section will describe the ways in which the HPS can achieve optimal performance.

5.1 Dispatch

OBJECTIVE

PURSUE OPERATIONAL RESPONSIBILITY OF HAMILTON'S LAND
AMBULANCE DISPATCH WITH CORE DISPATCH FUNDING REMAINING
A PROVINCIAL RESPONSIBILITY



In March 1998, the MOH and the Red Tape Commission created the Land Ambulance Transition Taskforce (LATT) to address changes contemplated with the revisions to the *Ambulance Act* which were to take effect in the year 2000. The LATT developed a series of recommendations for a patient-focused ambulance system that is seamless, accessible, accountable, integrated, and responsive. While many of the LATT recommendations were addressed, one that remains outstanding is ambulance dispatch reform. The LATT identified the need to integrate the operation of the dispatch with the municipal paramedic service delivery.

In 2001, the IBI Group conducted a review of HPS operations and reported a number of challenges with Hamilton CACC:

- Serious shortage of personnel at all levels
- Inability to sustain minimum coverage
- Rapid turnover in staff attributed to high workload, stress, and relatively low wages
- Absence of experience at communicator level due to high staff turnover
- Communicator staffing falling short of the calculated model requirement
- CACC staffing model underestimates the true staffing requirements
- CACC would benefit from a well defined and active quality assurance program
- Management presence needs to be strengthened
- Communications protocols between fleet and CACC should be reviewed

The IBI report, while dated, outlined the differences between "level of effort" land ambulance provision as opposed to "performance based" land ambulance service. In this distinction the report clearly identified the need for accountability of the ambulance dispatch operations to municipal officials responsible to monitor the quality of their ambulance operation performance while attempting to control costs. A performance-based system is only made possible where the operation of the dispatch centre which controls both the assessment and prioritization of calls and the movement and activities of the ambulance resources is wholly aligned and responsive to the actual ambulance service operations.

Fully integrating and aligning the CACC operations with paramedic services requirements provides opportunities for innovation and improved service to the community. With a 90th percentile emergency dispatch call handling time of more than three minutes, the dispatch operations continue to consume a large portion of response time. Given that the CACC is under its own management, services are unable to effectively influence the operations of the CACC.

The success of this approach was demonstrated by Toronto Paramedic Services well before paramedic services were downloaded to municipalities. Toronto successfully took responsibility of land ambulance dispatch operations and implemented several types of innovative technology to support communicator decision-making and operational performance in combination with the MOH's Computer Aided Dispatch (CAD) software. Toronto also moved to the more precise Medical Priority Dispatch System (MPDS) triage tool and integrated other technology such as CADPortal, Headstart, smartphone digital paging. Progress by Niagara and more recently Ottawa has been similar to that experienced in Toronto.

A more effective and efficient system of dispatch is one in which the ambulance service that is impacted by the dispatch system develops the solutions to dispatch challenges. Assuming responsibility of dispatch would allow for innovative solutions including more timely technological advances. For example, including secondary clinical advice, screening and call diversion at dispatch to better triage calls can help improve hospital offload delay performance. Placing a clinician in dispatch is also discussed in relation to community paramedicine (see Section 5.3 on Mobile Integrated Health). Innovation could also take the form of placing a senior ACP in dispatch to provide advice on Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) incidents and other technical operations. Innovative solutions might also include an online booking system for inter-facility transfers and pre-populating and targeting the details of transfer requests to minimize the call-taking process that currently exists.

To better align and integrate the operations of dispatch with HPS and allow for innovation to improve service delivery, it is recommended in this Master Plan that HPS pursue and advocate dispatch operational responsibility be transferred to HPS. The MOH would continue to provide shared communications infrastructure, core funding and regulatory oversight.

5.2 Deployment

OBJECTIVES

- INCREASE THE NUMBER OF ADVANCE CARE PARAMEDICS (ACPs) TO A LEVEL THAT ENABLES 90% OF CALLS REQUIRING ACP INTERVENTION TO HAVE AN ACP RESPONSE
- REDEPLOY EMERGENCY RESPONSE VEHICLES (ERVs) TO IMPROVE RESPONSE TIME PERFORMANCE
- UPDATE THE TIERED RESPONSE AGREEMENT (TRA) TO REDUCE
 UNNECESSARY USE OF HAMILTON FIRE DEPARTMENT RESOURCES ON
 MEDICAL CALLS TAKING INTO CONSIDERATION THE IMPACT OF THE
 MODIFIED TRA DURING THE PANDEMIC

Advance Care Paramedics

As described earlier, HPS employs two levels of paramedics, Primary Care Paramedics (PCPs) and Advance Care Paramedics (ACPs). PCPs perform controlled medical acts to effectively treat the majority of patients' illnesses or injuries. ACPs utilize more advance knowledge and skills to treat more complex medical or traumatic injuries. An outline of the scope of practice for PCPs and ACPs can be found in Section 3.2.

The severity of a patient's condition determines the level of medical intervention required by a paramedic. The Canadian Triage and Acuity Scale (CTAS) establishes the levels of severity of a patient's condition. CTAS levels are used by paramedics and hospitals to ensure consistency on how a patient is triaged.



Resuscitation

- Threats to life, limb or function
- Immediate aggressive intervention required



Emergent

- Potential threats to life, limb or function
- Rapid intervention required



Urgent

- Conditions that could progress to a serious problem
- Potential to require emergency intervention



Less Urgent

- Conditions related to age, distress, potential for deterioration or complications
- Intervention within 1-2 hour



Non-Urgent

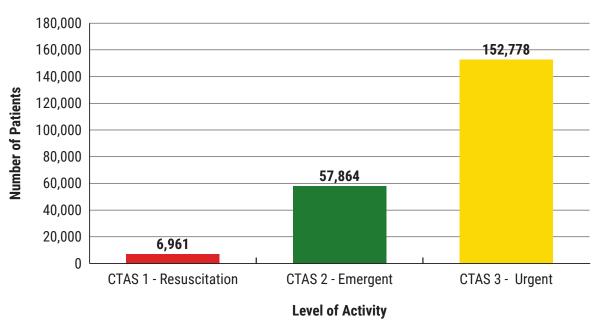
- Conditions that are acute but non-urgent, includes chronic problems with or without deterioration
- Intervention can be delayed or referred to other areas of health care system

CTAS levels 1 and 2 encompass critically ill or injured patients who require priority attention. Such conditions as cardiac arrest, respiratory arrest, severe respiratory distress, or unconsciousness are considered a CTAS 1. CTAS 2 includes moderate respiratory distress, vomiting blood, hypertension, altered levels of consciousness, severe fever, chest pains and major blunt trauma among other conditions. Conditions that are determined to be a level 1 and 2 on the CTAS scale require paramedics with advanced care training to provide life-saving interventions such as intravenous therapy, intubation, needle thoracostomy and administering more complex medications such as morphine, dopamine or adenosine.

CTAS 3 includes conditions such as shortness of breath, hypertension, and vomiting. Although CTAS 3 conditions are not as acute, they may require measures such pain control through medication and minor stabilization interventions such as intravenous therapy. As such, ACP assessment and skills may better support the needs of CTAS 3 level conditions.

Patients identified at CTAS levels 4 and 5 have less severe conditions such as sunburns, minor cuts and minor bites caused by animals and insects. At these levels of acuity there is typically little to no medical intervention that requires ACP skills. However, their additional base knowledge is beneficial in assessing low acuity calls to determine whether transport to hospital is required or if the patient can safely be shifted to an alternative destination or referral rather than transporting to hospital.

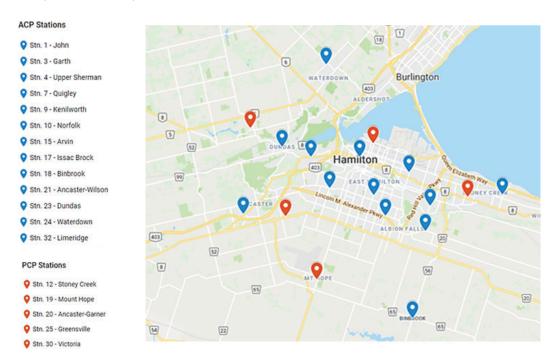
The following chart shows the number of patients from 2016 to 2020 identified by Hamilton paramedics as scoring levels 1, 2 and 3 on the CTAS scale.



Hamilton Paramedic Service Patient Acuity at Paramedic Contact 2016-2020

Over five years from 2016 to 2020, more than 217,000 patients were considered to have higher acuity conditions and therefore potentially required an ACP for medical intervention.

Currently, about 17% of paramedics are ACPs, including part time staff. They are deployed from various stations across the city as indicated by the blue marker in the map below:



Not all vehicles in these stations are staffed with an ACP. Currently, the HPS utilizes a dynamic staffing model in which the number of vehicles staffed matches call demand. Therefore, during peak hours more vehicles are added to handle the increase in calls. There are 13 vehicles designated as ACP resources with from six to 13 ACP staffed vehicles on duty each day.

In addition to having a limited number of ACP staffed vehicles, the current dispatch system requires the closest ambulance be assigned to emergency calls rather than the closest ambulance with the best matched skillset. This results in ACPs being assigned to calls for which their skills are not necessarily required. It further results in situations where an ACP ambulance has to be "layered" as a second vehicle responding to calls which require critical ACP interventions.

As previously described, the MOH oversees the dispatch centre, CACC. CACC is responsible for receiving 911 medical calls, triaging the patient's condition, and assigning appropriate paramedic service recourses to the call. Currently, CACC uses the Dispatch Priority Card Index II (DPCI II) to determine the priority of the call. However, this tool is not sensitive in the questions to be asked of the 911 caller. This lack of detail can lead to inadequate information causing the dispatcher to make a determination about the patient's condition that is different than the outcome of the assessment made by paramedics when they arrive on scene. Furthermore, the DPCI II utilizes just four priority levels, two for emergency response and two for non-emergency response. As such, it has a low level of sensitivity and specificity. Consequently, DPCI II tends to over-prioritize calls resulting in the use of lights and sirens, deploying multiple vehicles and/or ACPs when they are not required. Recognizing the issue of dispatching resources unnecessarily, the province has committed to replacing the DPCI II tool with the Medical Priority Dispatch System (MPDS). MPDS would enable high sensitivity and specificity allowing for more appropriate response levels when dispatching paramedics. While the original provincial plan would have seen MPDS implemented in late 2019 or early 2020, the actual implementation of this dispatch reform is not expected until at least 2023.

With limited ACP resources being utilized for calls that do not require that level of knowledge and skill, the number of ACPs available to attend CTAS 1 and 2 calls that require ACPs is diminished. In fact, from 2016 to 2018 an ACP attended a CTAS 1 call just over 53% of the time and a CTAS 2 call almost 39% of the time.

CTAS at Patient Contact	# of Patient Records	ACP Attended Events	% Compliance of ACP at Events				
1	4,729	2,516	53.2%				
2	35,793	13,773	38.5%				

Source: Interdev iMedic database

In order to ensure ACPs are more readily available when required, this Master Plan recommends increasing the number of ACPs to a level that would enable at least 90% of the calls requiring ACP intervention to have an ACP response. The benefits of this approach include:

- Higher level of care to all patients no matter their condition or level of acuity
- Increase in available ACP resources for emergency calls (even if ACPs are also dispatched to nonemergency calls)
- Reduction in dual responses when PCPs arrive at a call first and determine they need to call in an ACP as well

HPS will increase the number of ACPs in its workforce through the annual recruitment process and through the City of Hamilton's tuition reimbursement program for existing PCPs who would like to obtain ACP certification.

Emergency Response Vehicles

An Emergency Response Vehicle (ERV) is a vehicle that responds to medical emergencies and is staffed by one paramedic to provide emergency medical services without the ability to transport patients. ERVs are used by paramedic services for the following purposes:

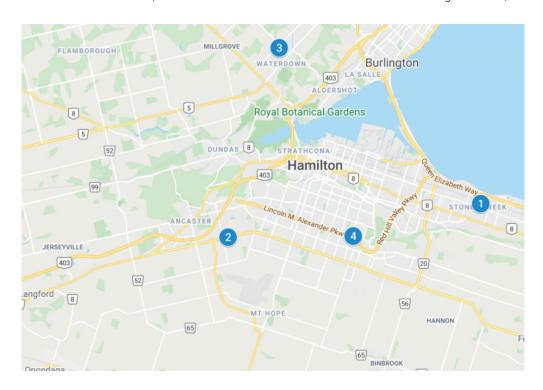
- 1. To provide a rapid response and initiate care by a trained paramedic when an ambulance is not immediately available
- 2. To provide enhanced clinical expertise by an ACP, when there are limited ACP resources on an ambulance
- 3. For critical medical or traumatic patient conditions, to augment ambulance response by providing a second trained paramedic, therefore effectively increasing the quality of care a patient receives

Unit hour utilization (UHU) is a proxy to determine the productivity of a paramedic service vehicle. When compared to HPS ambulances, ERVs' productivity ranged from three to nine times less than that of ambulances between 2015 and 2020. These units are available to serve outlying communities to ensure a paramedic response to an emergency is timely.

Since 2013, HPS has utilized its four frontline response ERVs to provide sustainable coverage in rural and suburban areas when ambulances are responding to emergencies in the urban area of the city.

Currently, ERVs are deployed from four stations as indicated in the map below:

- 1. Station 15 Arvin Avenue, Stoney Creek
- 3. Station 24 Parkside Drive, Waterdown
- 2. Station 20 Garner Road, Ancaster
- 4. Station 32 Limeridge Road E., Hamilton



The balance that must be achieved is to ensure appropriate paramedic response in areas outside of the city, while ERVs also contribute to decreasing response times for the city overall. To determine if a redeployment of ERVs can contribute to this goal of decreasing response times, three scenarios were analyzed using the Darkhorse Analytics tool to identify the performance metrics for:

- a) the current deployment model of ERVs as a static resource from an assigned station,
- b) areas of the city with less optimal response performance, and
- c) redeployment of ERVs into areas of the city with less optimal response performance.

Current Deployment Model

Baseline metrics were established for how ERVs are currently deployed as a static resource from an assigned station. The areas reviewed included:

- 1. Drive time to an emergency by any vehicle (ambulance or ERV)
- 2. Overgoal calls, that is, calls that exceeded the City of Hamilton and MOH approved target response time of 10:03 minutes
- 3. Overall performance, which reflects the combination of 1 and 2

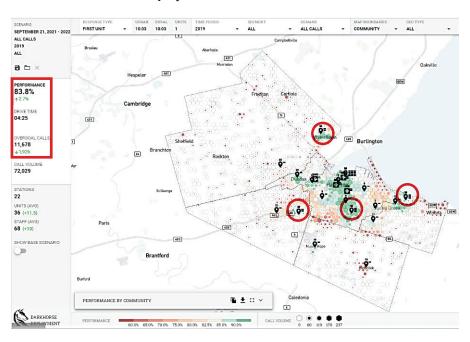
A summary of these baseline performance metrics for the current ERV deployment model are illustrated below and include:







2019 Deployment Model - ERVs at Stations



Underperforming Areas

Areas of the city were compared to each other, to identify response areas that were not performing optimally. Criteria for this analysis included:

- 1. No ambulance station in the immediate area
- 2. Response performance was not optimal when compared to other areas
- 3. Number of calls

From this analysis, the following areas were identified as areas where there are opportunities to improve performance:

- Upper James Street and Rymal Road West (Ryckmans Corners)
- Golf Links Road and Hwy 403 (The Meadowlands)
- Barton Street East and Centennial Parkway area

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2019 Deployment Model - Areas with Less Optimal Response Performance

Redeployment of ERVs

A variety of models were tested in an effort to improve performance in these underperforming areas. As a result of these analyses, the following three areas were identified as areas where ERV service would be the most beneficial for improving response time performance:

- One ERV redeployed to the area of Ryckmans Corner
- One ERV redeployed to the area of the Meadowlands
- One ERV redeployed to the area of Barton Street East and Centennial Parkway

The ERV at Station 24 in Waterdown was shown to be optimally placed for performance in that suburban area of the city and is therefore recommended to remain at Station 24.

The performance metrics for ERV coverage of these areas of the city are illustrated in the map below and as follows:







2019 Deployment Model - Redeployment of ERVs into Areas with Less Optimal Response



Redeploying the three ERVs from Stations 15 (Arvin Avenue., Stoney Creek), 20 (Garner Road., Ancaster) and 32 (Limeridge Road., Hamilton) to being mobilized in the areas identified above will improve response performance from the current static model. Drive time will be reduced by 13 seconds, overgoals or responses that do not meet the target time of 10:03 minutes will be reduced by 1,496 calls and overall performance would be improved by 2.1%.

It is therefore an objective of this Master Plan that ERVs be redeployed to improve response time performance to better serve all areas of the city.



Tiered Response Agreement

A Tiered Response Agreement (TRA) is a formal written document negotiated between two or more emergency service agencies. It outlines local criteria for a multi-agency response to a life-threatening or public safety incident. It is a voluntary program based on collaboration that recognizes when agencies work together, they are better equipped to meet the emergency needs of the community.

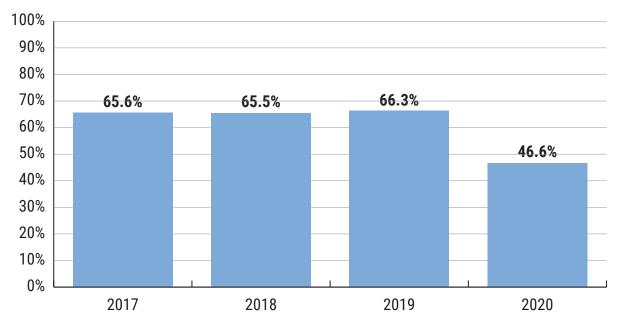
The purpose of a TRA is to ensure the timely availability of resources to mitigate medical emergencies. A rapid first response results in the best possible outcome for patients who are in a potentially life-threatening situation. Studies have shown that rapid response and early intervention prior to the arrival of advanced paramedic care can greatly reduce mortality and morbidity.

The TRA between the Hamilton Paramedic Service and the Hamilton Fire Department (HFD) is intended to allow for a fire service response time advantage in arriving at the scene of an emergency to begin critical medical intervention until paramedics arrive. It also provides the ability for additional fire resources to assist paramedics as required.

The existing TRA has been in place, essentially unchanged since the City of Hamilton assumed responsibility for the delivery of Land Ambulance Service in 2000. Over the years there have been changes in evidence-based medical practices, mandated response time standards and reporting, response capacity of both fire and paramedic services, paramedic scope of practice, firefighter first aid procedures and ambulance dispatch call assessment protocols. Despite evolving practices and procedures over the last two decades, a comprehensive review and update of the TRA had not been undertaken.

In 2019, the HFD identified the need to review the TRA in the Fire Service Delivery Plan (2019-2028) to ensure HFD resources were not being utilized unnecessarily. For example, firefighters were dispatched to some medical calls where paramedics arrived at the same time or shortly after firefighters who were then not needed. In some cases, calls were cancelled after firefighters were already dispatched as it was determined their assistance was not required. Such circumstance can put a strain on HFD resources.

The majority of HFD calls are for medical emergencies. Prior to 2020, when the TRA was modified, approximately 66% of the HFD's calls each year, or over 21,000, were medical.



% of HFD Responses to Medical Calls 2017 - 2020

Source: City of Hamilton, Service Profiles, Hamilton Fire Department Profile

A review of the TRA was required to ensure the appropriate fire services resources are being dispatched according to the medical needs of patients.

In late 2019, a project team was convened comprised of subject matter experts from HPS, HFD and CACC dispatch services as well as an emergency medical physician. The team sought to identify life-threatening calls that would benefit by a fire service time advantage where firefighters are first on scene and capable of performing critical medical interventions until paramedics arrived. To achieve this, the team undertook a review and analysis of the following:

- 1. Current tiered response data and current state of practice related to medical procedures and responses of the Hamilton Fire Department
- 2. Available medical literature regarding efficacy and impact of fire first response to medical calls
- 3. CACC's Dispatch Priority Card Index II (DPCI II) tool and paramedic response data to identify the potential for meaningful fire service first response intervention on medical calls

Through such a review and analysis of available evidence, the team uncovered some limitations including an imprecise dispatch tool that over prioritizes calls, a lack of clinical studies in the area of a fire response to medical calls and challenges in quantifying some response data due to the methods used to collect information. These limitations meant there was a lack of definitive evidence to support any significant modifications to the TRA. The team drafted recommendations aimed at improving response procedures, data collection methods, data sharing and integration processes and dispatch procedures. The team concluded that another review of the TRA was required once improvements were made and MOH implemented the more precise dispatch tool called Medical Priority Dispatch System or MPDS® (expected in 2023).

However, as the team's report was being finalized, the pandemic struck Hamilton which necessitated immediate modifications to the TRA. The calls on which the HFD were tiered were limited to the most serious medical calls, motor vehicle collisions and vital signs absent calls.

This change helped to reduce unnecessary exposure of firefighters to potentially COVID-19 positive patients. Additionally, it helped to ensure that PPE was not wasted as firefighters may have only required to use PPE for mere moments until paramedics took charge of the patient.

As a result of the modified TRA, the medical calls HFD responded to dropped by 20%. In 2020, 46% of HFD calls were for medical emergencies down from 66% in previous years.

Over a year and a half into the pandemic and as yet, HPS has not identified any negative impacts as a result of these temporary adjustments to the TRA. Despite the reduction in fire services' resources at life-threatening medical calls, no adverse events or issues have been reported. This will have to be more closely analyzed when an update of the TRA is resumed, as it indicates HFD resources are not required on some medical calls. This Master Plan recommends an updated TRA reduce the unnecessary use of HFD resources on medical calls to preserve HFD resources for fire calls based on evidence from a modified TRA during the pandemic.

5.3 Offload Delay Mitigation Initiatives

OBJECTIVE



CONTINUE TO IMPLEMENT AND IMPROVE INITIATIVES TO REDUCE OFFLOAD DELAY IN COLLABORATION WITH HEALTH CARE SYSTEM PARTNERS

Shortly after the health care reform introduced by the Ontario government in the late 1990s, ambulance services began to experience a phenomenon of an extended delay when transferring the care of patients from paramedics to hospital staff. The length of this delay would continue to increase, thereby increasing the length of time paramedics wait in Emergency Departments with their patients. The MOH-issued patient care standards definitively require paramedics to remain with the patient, and continue to care for the patient, until the hospital accepts responsibility for the patients care.

In a report submitted to the MOH in 2005 titled Improving Access to Emergency Services: A System Commitment⁸⁸, it was recommended that:

The time from ambulance arrival to patient placed on an Emergency Department stretcher should be 30 minutes, 90% of the time.

The report noted that an Offload Delay (OLD) occurs when the hospital does not accept responsibility for the care of a patient within 30 minutes of the ambulance arriving at hospital.

As a result of a variety of system pressures, hospitals in Hamilton continue to struggle to meet this target recommendation. OLD has become an increasingly complex issue, impacted by a variety of health care system issues, and leading to great reductions in the number of hours paramedics are available to respond to calls.

⁸⁸ Improving Access to Emergency Services: A System of Commitment (Schwartz, 2005)



Between 2016 and 2020, HPS had a total of 1,017,545 hours in which paramedics were on calls. Of these total street staff hours 129,055 hours or approximately 13% of the paramedics' time was spent waiting at Emergency Departments for longer than 30 minutes until hospitals took responsibility for the care of the patient. Excluding the anomalous 2020 experience, where the annual OLD hours were lower due to the early pandemic influence on hospital performance, the annual cumulative hours of offload delays has continued to increase over time:

- 2016: The equivalent of 2.63 ambulances on OLD at hospital for the entire year
- 2017: The equivalent of 3.08 ambulances on OLD at hospital for the entire year
- 2018: The equivalent of 3.14 ambulances on OLD at hospital for the entire year
- 2019: The equivalent of 3.48 ambulances on OLD at hospital for the entire year

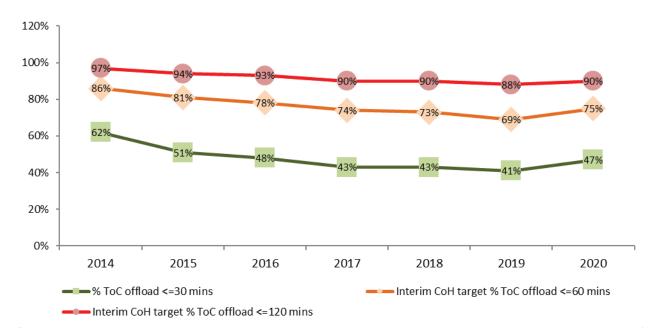
Hamilton Paramedic Service Total Street Staff Hours and OLD Hours > 30 Minutes 2016 - 2020



In 2015, HPS and hospitals agreed to an interim target of 60 minutes to transfer care of patients, 90% of the time. A target of 60 minutes is more attainable and therefore more likely efforts will be made to ensure it is achieved. Achieving the transfer of care (TOC) within 60 minutes 90% of the time would help to alleviate OLD and free up paramedics to be able to respond to other emergencies in the community.

The chart below shows the percentage of time patients were transferred to the care of hospitals within 30, 60 and 120 minutes for each year since 2014.

Hamilton Paramedic Service Transfer of Care % of Patients Offloaded within Target Time

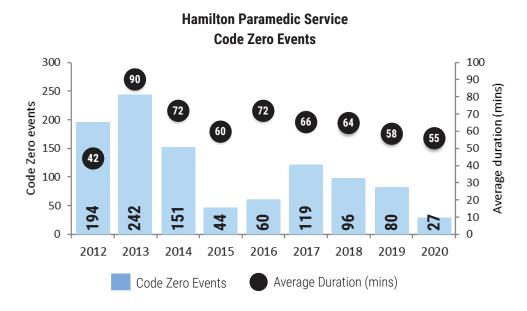


Code Zero Events

Long OLDs are strongly correlated with code zero events. A code zero event occurs when the number of ambulances available to respond to a call are limited to just one or none. When there are ten or more OLDs longer than two hours on any given day, a code zero is likely to occur. In the case of a code zero event, ambulances from neighboring municipalities are assigned to respond to emergency calls in Hamilton.

Code zero events continue to be a challenge for the HPS, hospitals, patients, and the community at large. In 2019, there were a total of 80 code zero events that lasted almost an hour on average. In 2020, that total number of code zero events greatly declined to a total of 27 that lasted almost an hour on average.

The graph below shows the number of code zero events from 2012 to 2020 and the average length of time in minutes a code zero event lasted that year.



The trend since 2015 has been an increase in code zero events with an emerging downward trend since 2017. The decline in code zero events in 2020 can be in part attributed to the pandemic which saw a reduction in calls during the first few months. In 2021, there has been a significant resurgence in hospital OLDs which coincides with an increase in code zero events and generally narrowed resources impacting response performance. HPS has been actively working with hospital partners to reduce OLD over the last several years, which has helped to curtail code zero events. Some of the initiatives undertaken with hospital partners are outlined in the next section.

Reducing OLD

Alternate Destination

In an effort to ease the burden of offloading times at hospitals, the MOH has amended the *Ambulance Act* requirement which directed paramedics to transport all patients to the Emergency Department. The amendment permits special care models which allow paramedics to transport patients to destinations other than hospitals, such as an urgent care facility and mental health and addictions facilities. Allowing transports to alternate destinations will divert some patients away from hospitals and alleviate OLD to free up paramedics' time. Furthermore, patients will receive more timely care at the most appropriate facility based on their condition. This patient-centred approach aligns with the province's vision for health care in Ontario.

A review of HPS electronic patient care records (ePCRs) between 2016 and 2020 shows that of the 415,730 ambulances dispatched on an emergency, 183,626 (44%) were transported to hospital with patients with minor to moderate injuries/illnesses (CTAS 3, 4 and 5). Approximately 44,016 (24%) of the minor to moderate injuries/illnesses (CTAS 4 and 5) would not likely have required hospital care and could have received appropriate treatment from another health care facility.

As noted earlier, a phone survey conducted by HPS of 550 Hamilton residents in 2018 indicated that 78% of respondents were aware of the OLD issue and 77% were comfortable allowing the paramedic to determine the most appropriate health care facility to which they could be transported for their minor health issues. These results indicate not only that the public has confidence in the paramedics' judgement for choice of facility but also that residents are confident they will receive appropriate health care in another facility other than the hospital.

Currently, HPS is working with Hamilton hospitals to develop Alternate Destination Guidelines (ADG) to ensure patients with a variety of less severe issues are taken to the appropriate facilities to receive the care that meets their needs.

ADG is one of many initiatives aimed at reducing OLD currently being led by the HPS.

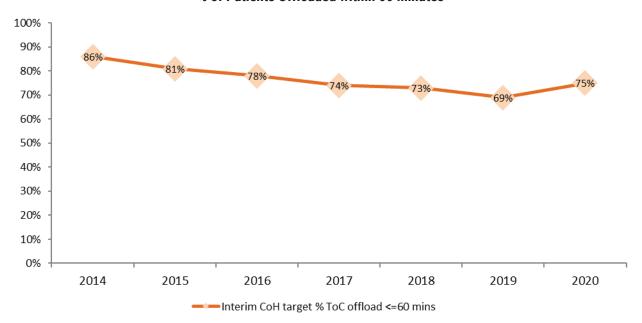
Mitigation Initiatives

In partnership with hospitals, HPS has implemented a range of quality improvement initiatives aimed at reducing OLD toward achieving the recommended TOC target time of 30 minutes or less. A summary of these initiatives is outlined in the table below:

OLD MITIGATION STRATEGIES						
Initiative	Description	Status	Result			
Alternate Destination Guidelines	Ability for paramedics to take patients to a facility other than a hospital.	In Progress	Currently transporting patients with substance-related issues directly to appropriate facilities.			
Response Analytics Dashboard	A "real time" dashboard used by the MOH dispatch centre to ensure even distribution of patients among hospitals.	Implemented 2018	Limited success, as the dashboard does not impact the volume.			
Fit-to-Sit	Paramedics place low acuity patients into the Emergency Department waiting room so they can leave to response to another call.	Implemented 2018	Limited success, due to low participation rate.			
OLD Supervisor	An HPS Supervisor facilitates TOC of patients.	Implemented 2016 Expanded 2019	Limited success, as the Supervisor has no authority over hospital operations.			
Double Up of Patients	When paramedic resources are limited, one crew monitors two patients allowing the other crew to respond to another call.	Revised 2015 Implemented 2012	Limited success, as this initiative requires that there be an available stretcher in the Emergency Department.			
Lean Initiatives	Quality improvement workshops with hospitals to work toward eliminating unnecessary OLD.	Implemented 2014 and on	Limited success as organizations must manage and mitigate risk associated with decreasing time on task.			
OLD Escalation Process	When an OLD reaches specified length of time, notification is elevated to senior leaderships of the HPS and hospitals to assist.	Implemented 2014	Limited success, as HPS does not have authority to control hospital operations.			
Mobile Integrated Health	A number of programs that serve patients where they live in their home or the community to prevent the need to call 911.	Implemented 2012 - 2014	Expansion of programs encompass all priority patient populations.			
Designated OLD Nurse Funding	Funded by the MOH, a nurse dedicated to accepting the care of patients from paramedics upon their arrival at the hospital.	Implemented 2012	Limited success as designated beds are used for alternative purposes or quickly consumed due to HPS call volume or system issues in the hospital.			
TOC Software	Computer software that is used to monitor and report on TOC times at area hospitals.	Implemented 2011	Limited success as this tool does not impact volume. This system is not well integrated into the full EMS and hospital systems.			
Patient Priority System	Allows for distribution of patients to certain hospitals to ensure optimal care based on patient condition.	Revised Annually	Limited success as this system does not impact the call volume.			

Despite the implementation of these initiatives over the past several years, there has not been a notable reduction in OLD times and TOCs greater than 60 minutes persist. Achieving a TOC within 60 minutes had been trending downward prior to 2020. In 2014, 86% of TOCs occurred within 60 minutes but by 2019 it had declined to 69%. The slight improvement in 2020 to 75% of TOCs within 60 minutes is likely a result of the temporary reduction in call volume at the beginning of the pandemic.

Hamilton Paramedic Service Transfer of Care % of Patients Offloaded within 60 minutes



It appears from the above graph that the OLD mitigation initiatives are not having an impact on TOC time as TOC target times are not being achieved. However, taking into consideration the increase in demand for HPS services over the years, it becomes clear that the OLD mitigation strategies are helping to minimize the decline in the number of times TOC target times are not achieved. In fact, while the number of patients transported to the hospital by HPS has increased, achieving the TOC target time of 60 minutes has remained relatively stable.

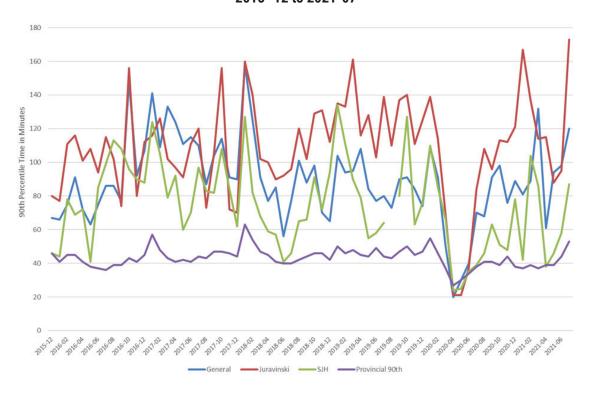
While the above data reflects information from both the HPS and the MOH dispatch center databases (see the chart below), the information provided directly by the hospitals' Cancer Care Ontario Access to Care (CCO-ATC) reporting system since 2015 regarding ambulance OLDs demonstrates that for Hamilton hospital sites the Ambulance Offload Times (AOT) are:

- Rarely within the agreed upon interim target of 60 minutes.
- Consistently higher than the provincial average at the 90th percentile
- Consistently amongst the highest reported for the province
- Consistently amongst the highest in the (former) HNHB LHIN area

Over the past 68 months that CCO-ATC has reported the hospital data the highest and the average reported monthly 90th percentile AOT were:

Dec 2015 to July 2021	Hamilton General	Juravinski	St. Joseph's
Highest Reported	2:38 (158 minutes)	2:53 (173 minutes)	2:20 (140 minutes)
Average Reported	1:30 (90 minutes)	1:49 (109 minutes	1:23 (83 minutes)

90th Percentile Ambulance Offload Time 2015 -12 to 2021-07



Despite the efforts of hospitals and the OLD mitigation activities undertaken including diverting patients away from Emergency Departments, without system and capacity changes at the hospitals, OLDs will continue to challenge HPS service delivery. This will result in extending the expected time on task through the ten-year planning period.

Leveraging Technology

HPS is in the process of implementing the technology of FirstWatch® to enable different data systems to communicate and promptly turn data into useful real-time information. This technology has the capability of monitoring the length of time it takes to transfer the care of a patient to the hospital as it occurs.

Technologies to monitor and report on TOC times, such as FirstWatch, require integration with hospital systems so data can be fed to HPS systems and to the CACC in real-time. This allows TOC activities to be proactively managed and problems mitigated as soon as they arise.

Capabilities to interface with dispatch systems, access hospital records and ePCRs are also possible through this advanced technology. Such coordination with health care partners and integration of information technology (IT) and systems provides progressive tools by which paramedics and health care providers can deliver the best care possible to patients. The development of an IT strategy to assist HPS in achieving operational efficiency and optimal patient outcomes is discussed further in Section 5.8.

Delays in the time it takes to transfer the care of a patient from the paramedics to the hospital continue to be a challenge for HPS. Paramedics' time spent in the Emergency Department with their patient waiting to transfer care means they are unavailable to respond to other emergencies in the community.

Through a variety of collaborative initiatives with the hospitals, the trend of not achieving TOC target times has been slowed despite the growing demand for service. Therefore, it is recommended that OLD mitigation initiatives in collaboration with health care system partners continue to be implemented, improved, and expanded where possible.

In addition to mitigation initiatives, HPS's Mobile Integrated Health programs have been effective in helping to prevent 911 calls and divert clients away from hospitals thereby avoiding transports to hospitals and alleviating OLD. The next section describes these programs and the successful outcomes.



5.4 Mobile Integrated Health

OBJECTIVE

- INCREASE THE CAPACITY OF MOBILE INTEGRATED HEALTH (MIH) TO ADDRESS THE GROWING DEMANDS FOR COMMUNITY AND AT-HOME SUPPORTS:
 - A) CREATE A FULL-TIME POSITION TO LEAD THE CARDIAC SAFE CITY PROGRAM
 - B) ENSURE INTEGRATION, INVOLVMENT AND ENGAGEMENT OF FRONTLINE PARAMEDICS IN MIH ACTIVITIES
 - C) ADVOCATE FOR ADDITIONAL COMMUNITY PARAMEDIC POSITIONS THROUGH THE MINISTRY OF HEALTH AND THE GREATER HAMILTON HEALTH NETWORK
- ADVOCATE FOR THE SUSTAINED FUNDING OF MIH TO BECOME A
 PERMANENT COMPONENT OF PRIMARY CARE IN ONTARIO IN ACCORDANCE
 WITH THE COMMUNITY PARAMEDICINE POLICY FRAMEWORK DEVELOPED
 JOINTLY BY THE ASSOCIATION OF MUNICIPALITIES ONTARIO (AMO) AND THE
 ONTARIO ASSOCIATION OF PARAMEDIC CHIEFS (OAPC)
- DEVELOP A PLAN IN COLLABORATION WITH STAKEHOLDERS TO ESTABLISH A CENTRAL CLINICAL HUB TO ACCESS MIH AND OTHER HEALTH SERVICES STARTING WITH INSTALLING A CLINICIAN AT DISPATCH

In late 2014, the provincial government provided funding to 20 land ambulance services in Ontario to trial community paramedicine initiatives. The goal was to mitigate unnecessary transports to hospital of patients with non-life-threatening issues. Through prevention activities, community paramedicine allows vulnerable residents to receive clinical support in their homes and reduces pressure on the health care system. Community paramedicine has become an integral part of health care in communities, yet despite the prevalence and significance of community paramedicine activities across municipalities, they remain pilot projects and lack permanent funding.

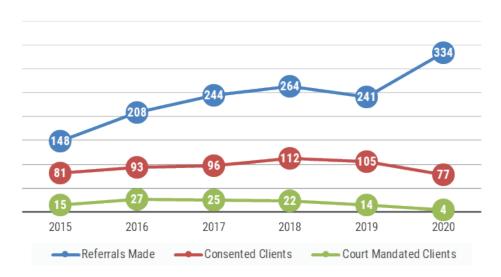
Hamilton's Community Paramedicine Program has evolved over the years to meet the growing and diverse needs of clients. In 2020, the program further expanded to become Mobile Integrated Health (MIH) with an increased capacity to reach more people in the community as well as the addition of pandemic response initiatives.

HPS has established several programs under the umbrella of the MIH that offer a variety of services to a range of clients. These programs and some of the outcomes are described below.

Social Navigator Program (SNP)

The SNP was implemented in 2011 as a collaboration between HPS and Hamilton Police Service. The program provides outreach services for clients with diverse and complex needs who have frequent contact with police and paramedics due to underlying mental health and addiction challenges. According to the profile of users of ambulance services described in Section 3.3, HPS responded to over 5,100 calls related to mental health and addiction in 2018. Through case management, the SNP provides support utilizing a referral process.

Since 2015, the SNP has seen an increase of over 125% in the number of referrals made to service providers to support SNP clients and from 2015 to 2019 there was a 30% increase in intensive case management clients (i.e. consented clients). Although there was a decrease of these clients in the program in 2020, the needs were greater and episodic assistance increased from 301 individuals in 2019 to 512 in 2020.



Evidence has shown the SNP has been successful in reducing the amount of times police were called for clients for adverse purposes. In 2020, SNP clients' negative interactions with police decreased by 55% after being in the program for three months.

Since the beginning of the pandemic, the city has seen a rise in the number residents experiencing unsheltered homelessness. Many of these people are living in encampments in tents on public or private property without running water or electricity. In response, the SNP has added another paramedic to the team to work with encampment residents.

@Clinic Program

As noted earlier, seniors (age 65 years and older) made up 45% of patients served by HPS in 2018. They are also the largest portion of repeat 911 callers which totalled 9,848 calls or 16% of the total call volume in 2018.

The @Clinic Program focuses on preventive activities by placing a Community Paramedic led clinic in select CityHousing Hamilton buildings where a high number of vulnerable seniors reside. Clinic interventions focus on health promotion, nicotine replacement, monitoring and prevention of high blood pressure, diabetes, cardiovascular disease, falls and social isolation.

Dr. Gina Agarwal at McMaster University's Department of Family Medicine studied the impact of the @Clinic program and found that in comparison to the CityHousing Hamilton buildings that did not offer the clinic, those with access to the clinic had 22% fewer emergency calls for an ambulance and more health risks were diagnosed among residents.⁸⁹

Flu Clinics

In 2018, the @Clinic Program introduced the provision of influenza immunization. This additional service available during the flu season helps to minimize hospitalizations of seniors who are at higher risk of contracting the flu.

With the existence of the COVID-19 virus in 2020, it was more important than ever to be inoculated. In response, the Flu Clinic program expanded to include Mobile Flu Clinics across the city at the Hamilton Public Library's Central location, shelters, residential care facilities, retirement homes, long-term care facilities and the Neighbour-to-Neighbour Centre. In total, 1,840 flu shots were administered between October 19 and December 16, 2020.

⁸⁹ http://www.cmaj.ca/content/190/21/E638?ijkey=17e6bbadb0c104dcf543b02924d-683382d82445c&keytype 2=tf_ipsecsha#T6

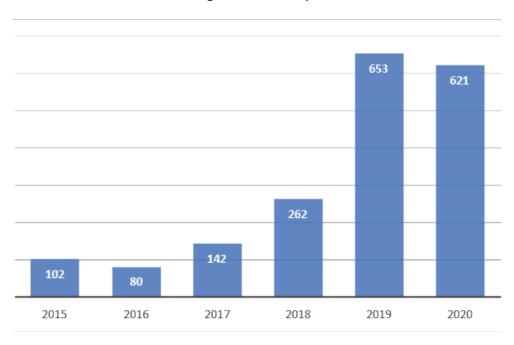
@Home Program

The @Home Program provides support to clients in their homes after they have been identified as frequent users of ambulance services. A Community Paramedic visits the client where they live, conducts an in-depth assessment and can quickly connect the client to the resources they require related to a variety of issues such as congestive heart failure, diabetes, falls, mental health and addiction and palliative care. During the pandemic, the @Home Program also provided COVID-19 testing and vaccinations for homebound residents.



The demand for the @Home Program has increased significantly since it was established. As shown in the graph below, there has been an increase in the number of clients enrolled in the program each year since 2015, except for a slight decrease in 2020.

Total @Home Clients by Year



Remote Patient Monitoring (RPM)

RPM is a component of many MIH programs. RPM leverages technology to monitor clients with chronic conditions in their home. The patient-generated health data is transmitted wirelessly to a database and monitored by a Community Paramedic. Through this program, a client's condition is proactively managed before it requires an emergency 911 response and hospitalization.

In 2020, the RPM program was expanded to monitor patients at home after being hospitalized with COVID-19 enabling the early and safe discharge of patients from hospital and rapid identification should their condition deteriorate at home.

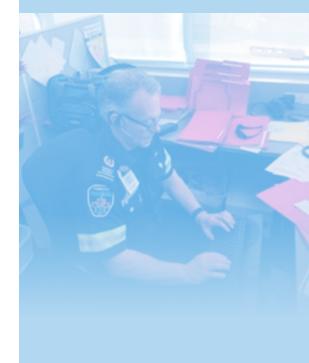
By 2020, at total of 115 clients were enrolled in the program with Community Paramedics receiving 3,473 alerts from their remote devices, yet only four transports to hospital were required.

Paramedic Palliative Outreach Support Team (PPOST)

The PPOST program consists of a specially trained team of Community Paramedics who provide support through a palliative crisis when a patient's palliative care team is unavailable. In 2020, the team supported eight patients in their homes preventing hospitalization. In April 2021, the Paramedics Providing Palliative Care (3PC) project was launched in which all paramedics were trained to provide palliative care to registered patients.

Emergency Department Diversion to Withdrawal Management (EDWIN)

The EDWIN program enables paramedics responding to a 911 call to transport adults and youth with addiction-related issues to a withdrawal management facility rather than to Emergency Departments. Over 110 clients have been supported through this program with only one requiring transport to hospital.



Public Access Defibrillation

MIH is responsible for the maintenance and tracking of Automated External Defibrillators (AEDs) throughout the city and advocate to increase in the number of AEDs in the community. Medical evidence shows that when an AED and CPR are administered immediately, often by a bystander, the chance of survival from sudden cardiac arrest is substantially improved by up to 75%.

In 2020, there were 443 AEDs in Hamilton with two uses. AEDs are located throughout the city in public buildings, such as City of Hamilton office buildings, schools, libraries, local event arenas, fitness centres, recreational facilities, hockey arenas and seniors' centres. In 2020, AEDs were also installed at Tim Hortons Field.

Currently, there is no dedicated resource assigned to the Public Access Defibrillation program which is managed by the MIH lead responsible for all MIH programs. Thus, this Master Plan recommends creating a full-time position to lead this program that supports the City of Hamilton's Cardiac Safe City program. The Cardiac Safe City program recognizes the best chances of surviving sudden cardiac arrest requires early CPR and the use of an AED. The program includes first aid, CPR and AED training for the public. This new position would be responsible for all aspects of the program including increasing the number of AEDs in public spaces, public education and reporting on program activities and outcomes.

This position would also oversee other programs such as the Stop the Bleed program and support the education and asset management for naloxone kit and epinephrine autoinjectors.

Community Paramedic Long-Term Care (CP-LTC)

Hospitals report a significant number of alternative level of care patients awaiting long-term care placement as one factor contributing to bed shortages. Through this program, Community Paramedics are able to support patients, both in person and virtually, who are waiting to be placed thereby helping them to stay in their homes.



Pandemic Response

MIH activities expanded in 2020 in response to the needs of the community as a result of the COVID-19 pandemic. In collaboration with Hamilton Public Health Services, MIH carried out the following activities:

- COVID-19 Swabbing From April 2020 to the end of June 2021, a COVID-19 Swabbing Team conducted 21,599 tests at congregate settings and patients who are homebound
- Vaccine Aftercare Paramedics supported Public Health Services by designing and providing aftercare at seniors' buildings to monitor those who received the shot
- Home-Bound Vaccinations Paramedics administered 3,325 vaccines for homebound patients between the spring of 2021 and the end of July 2021



Summary

HPS provides a range of services offered through MIH. Evidence suggests these programs are helping to reduce 911 calls which in turn eases elevating OLD times. These programs support the provincial objectives to improve health care and end hallway medicine. MIH supports vulnerable populations and high users of 911 where they live by proactively providing clients with the services they require in the convenience of their own residence. Observable impacts of the program indicate an improvement to health care access and outcomes for those at-risk while decreasing dependence on the health care system.

The benefits of MIH programs have been recognized by community agencies that increasingly make referrals to the various programs. During consultations with stakeholders, as described in Section 3.2, community paramedicine was identified as a key approach to proactively handling the over-burdened health care system and helping people manage their own health in their own environments. Stakeholders recommended that a priority of the HPS Master Plan be to expand these programs to serve more people (e.g. @Clinic in more CityHousing Hamilton buildings), more vulnerable populations (such as youth) and address a wider range of issues (such as clinics for mental health and addictions and seniors' isolation, etc.).

Despite the wide range of programs provided through MIH, its resources are limited. For some programs, HPS must utilize frontline paramedics when they are not needed for emergency response or paramedics who are on modified duty. These options are not reliable as paramedics may be called away to respond to an emergency and modified duty is temporary.

To ensure that MIH can continue to provide essential health care services to the people most in need in the community now and in the future as demand grows, this Master Plan recommends that current resources be optimized by integrating MIH activities into frontline paramedic services and involving and engaging all frontline paramedics in MIH programs. HPS will achieve this through communication, education, and training so all paramedics are aware and capable of supporting programs related to palliative care (3PC) and mental health and addiction (EDWIN).

Furthermore, it is recommended that HPS advocate for additional full-time community paramedics through the MOH and Greater Hamilton Health Network to assist with the growing demands on MIH programs.

MIH programs are able to reach some of the most vulnerable in the community to help improve their access to health care and their quality of life. Pressures on the health care system are alleviated through these programs that prevent avoidable emergency rooms visits, provide early detection of health deterioration, and reduce length of stay when admitted to the hospital. They are innovative and agile, designed to meet the evolving needs of the community. In collaboration with partners, they have filled the gaps in health care services such as responding to the pandemic and seasonal surges of influenza.

Despite its benefits, MIH has yet to receive permanent provincial funding. Being permanent would help to address inherent health equity issues by enabling sustained access to health care for vulnerable populations in the community. Permanent MIH programs would enable them to be delivered in a more integrated, coordinated, and effective way and ensure there is no duplication of services or additional work for providers. As MIH becomes an integral part of the health care system, this Master Plan recommends that HPS follow the Community Paramedicine Policy Framework (June 28, 2021)⁹⁰ developed jointly by the Association of Municipalities Ontario (AMO) and the Ontario Association of Paramedic Chiefs (OAPC) to advocate for MIH programs to be funded as a permanent component of primary care in Ontario.

Clinical Hub

Given the significance of MIH programs and the growing demands for community and at-home supports, it is evident that HPS provides more than emergency response and transports to hospitals. In addition to the MIH programs that deliver care at home, in long-term care facilities, and in the community, paramedics provide clinical advice and deliver public education. For this reason, paramedic services are well-positioned to manage a central coordinating hub for the provision of mobile health care and clinical advice. Such a transformation would mean delivering more treatment in the home and clinical advice over the phone or virtually. It would require integrated service delivery in which paramedics work closely with other health care and social services professionals to provide coordinated patient care.

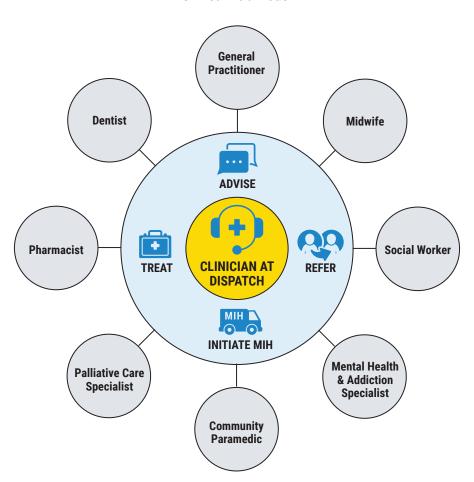
A central clinical hub would operate out of what is currently the dispatch centre. Health and social services would be accessed through the hub including paramedics, dentists, general practitioners, palliative care specialists, mental health and addiction practitioners, pharmacists, social workers, and midwives. Such a model would improve experiences and outcomes of patients who can access the support they need quickly. It would shift the burden of care away from emergency departments and hospitals as more treatment would be provided in-home by paramedics. From patients' homes, paramedics could access other health care professionals virtually. Patients would be monitored in their homes by paramedics remotely. Clinical advice and referrals would be given in-person, virtually or by telephone.

⁹⁰ https://www.amo.on.ca/sites/default/files/assets/DOCUMENTS/Reports/2021/MOH-LTCLTRAMO-OAPCCommunityParamedicinePolicy%20 Frameworkwjoint%20paper2021-06-28.pdf

A clinical hub also means fewer ambulances would be dispatched for non-urgent purposes. Currently, when 911 is called an ambulance is dispatched no matter the severity of the injury or illness. The highest priority calls, indicating risk of losing life or limb, generate an urgent response from an ambulance. Ambulances are also dispatched to low priority calls that are non-life threatening such as back pain, albeit without the urgency of a high priority call. A clinical hub model would offer more options for a 911 caller than just an ambulance response. Callers with less urgent issues as determined by dispatchers would be transferred to a clinician for secondary assessment. The clinician would then be able to advise the caller about next steps, recommend treatment, refer the caller to the appropriate health care practitioner, arrange for a Community Paramedic to visit the caller's home or send an ambulance if warranted.

This Master Plan recommends that a plan be developed in collaboration with the Greater Hamilton Health Network, community and provincial stakeholders that takes a phased approach toward establishing a central clinical hub in Hamilton. The first step in moving toward a clinical hub is to have a clinician assigned to dispatch. A clinician will perform secondary assessment of 911 calls and provide callers with advice, treatment, referrals, or access to MIH services to ensure they receive right care at the right time from the right practitioner. The transformation to a clinical hub model will change the manner in which services are organized and delivered to address growing community needs for in-home care while alleviating the pressures from the hospital system.

Clinical Hub Model



5.5 Clinical Practice

OBJECTIVES

- PURSUE PRIMARY CARE PARAMEDIC (PCP) ABILITY TO PERFORM SELECT SCHEDULE 2 PROCEDURES FROM REGULATION 257/00 OF THE AMBULANCE ACT:
 - A) SUPPORT PCPs IN BECOMING CERTIFIED IN PRIMARY CARE PARAMEDIC AUTONOMOUS INTRAVENOUS (PCP AIV)
 - B) SUPPORT PCPs IN BECOMING CERTIFIED TO ACCESS AND ADMINISTER A WIDER RANGE OF MEDICATION
- 12 IMPLEMENT A REQUIREMENT THAT ALL PRIMARY CARE PARAMEDIC RECRUITS BE PCP AIV CERTIFIED AS A CONDITION OF EMPLOYMENT WITH HPS
- TRAIN ALL PARAMEDICS IN INTERNATIONAL TRAUMA LIFE SUPPORT (ITLS)

As described in Section 3.2, ACPs have a scope of practice that is broader than that of PCPs. While PCPs can effectively treat the majority of patients' illnesses or injuries, ACPs have broader assessment and treatment skills for more complex medical conditions.

To increase the likelihood of better outcomes for patients, HPS endeavours to make available an increased level of clinical practice. This includes adding ACPs over time to achieve a 90% ACP response rate for patients requiring ACP assessment or intervention as recommended in Section 5.2, as well as expanding the scope of practice of PCPs in the ways outlined below.

Autonomous Intravenous and Medications

Schedule 2 of Regulation 257/00 of the *Ambulance Act* lists the controlled medical acts that can be performed by ACPs as part of their intensive training. PCPs are also able to perform these controlled acts only with the authorization of the medical director of the Base Hospital Program.

Two of these controlled medical acts within the scope of ACPs and performed by ACPs regularly are:

- Peripheral intravenous therapy placed in an extremity such as the hand, elbow, or foot
- Administration of drugs outside the scope of practice of PCPs

Training and certifying PCPs to include these additional two controlled medical acts would increase the knowledge and skills of PCPs to provide a higher level of care to the community.

In Section 5.2, the Canadian Triage Acuity Scale (CTAS) was described which categorizes the level of priority based on the severity of the patient's condition. CTAS 4 and 5 level patients typically require little to no medical intervention while CTAS 1, 2 and 3 patients are prioritized as urgent and likely to require paramedics to perform a controlled medical act.

The chart below shows the number of patients per CTAS level served by HPS between 2016 and 2020.

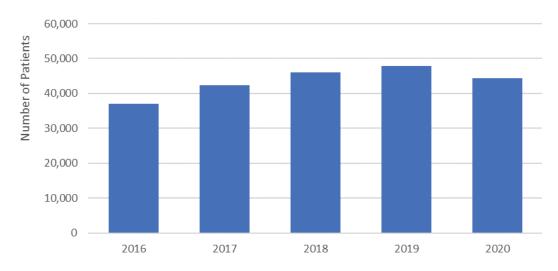
Hamilton Paramedic Service Patient Acuity at Paramedic Contact 2016 - 2020



CTAS 1 and 2 are high acuity patients. This results in the need for ACPs who are trained in providing potentially life-saving interventions to stabilize patients prior to and during the transport to hospital. CTAS 3 patients, while not as acute, may require a combination of comfort measures to control pain and minor stabilization interventions such as intravenous fluids.

Overall, the number of combined CTAS 1, 2 and 3 patients has been increasing since 2016 with the exception of 2020 when demand for service decreased in the early days of the pandemic, as illustrated in the following chart.





Expanding the scope of practice of all PCPs would enable them to conduct more medical acts to assist with the increasing number of higher acuity patients in the CTAS 1 to 3 categories.

In fact, an analysis of electronic patient care records between 2016 and 2018, shows that currently PCPs are able to conduct 12 of the 20 most frequently performed medical procedures while ACPs have the capability to perform all 20 procedures. An expanded scope of practice of PCPs to the level of PCP AIV (Autonomous Intravenous) would include initiating intravenous therapy and administering medications through the intravenous line such as morphine for pain relief and midazolam to treat seizures. As a result, PCP AIVs would be able to perform 18 of the 20 most frequent medical procedures.

Order of Frequency	Procedure	Scope of Practice			
		ACP	PCP	PCP AIV	
1	12 Lead Acquisition	✓	✓	✓	
2	Normal Saline	✓		✓	
3	ASA	V	~	✓	
4	Salbutamol	~	✓	✓	
5	IV Cannulation	~		✓	
6	Lock	V		✓	
7	Dimenhydrinate	~	✓	✓	
8	Nitroglycerin	V	✓	✓	
9	Acetaminophen	~	✓	✓	
10	Morphine	✓			
11	Fluid Bolus	~		✓	
12	Ibuprofen	~	✓	✓	
13	Ketorolac	~	✓	✓	
14	Epinephrine 1:10,000	~			
15	Midazolam	~			
16	Glucagon	~	✓	✓	
17	Orotracheal Intubation	~			
18	СРАР	~	✓	✓	
19	Glucose-Oral	~	~	✓	
20	Epinephrine 1:1,000	V	✓	✓	

HPS paramedics who also work for other services and certified in PCP AIVs are authorized to perform these additional procedures when working for HPS. Training PCPs employed by HPS to the level of PCP AIV would enable PCPs to initiate intravenous and administer additional medications to help reduce patients' suffering more immediately. Without this, patients in the care of PCPs would have to wait to be transported and admitted to the Emergency Department before receiving medication.

While PCP AIVs will not have the same scope of practice as ACPs they will be better equipped to assist ACPs during high acuity calls. ACPs will be able to delegate some of procedures to the PCP AIV thereby freeing up the ACP to perform other procedures that only ACPs are certified to perform. This enables more efficient and timely care since practices such as assessments and treatment can occur simultaneously. Furthermore, there will be times when an ACP is not available even when each staffed vehicle has an ACP resource. Mandatory education, vacation and retirements may create instances when a vehicle is without an ACP. In this case, a certified PCP AIV can provide additional treatment for more complex medical conditions than is currently provided by a PCP.

Recognizing the significance of extending the scope of practice of PCPs to provide the community with the best possible level of service, HPS has recently collaborated with the Base Hospital Program to develop and deliver the PCP AIV Course. The first course was offered in April 2021 with 56 PCPs completing the training and 15 fully certified in PCP AIV as of August 2021. HPS will run a second course in the fall of 2021 with the goal of training an additional 48 PCPs. Through the course, paramedics gain knowledge, confidence, and competency in the aspects of IV initiation, fluid therapy and medication administration. Paramedics are given the opportunity to practice the newly acquired skills in a controlled classroom setting prior to moving to the clinical environment before being certified.

The PCP AIV Course is available to any PCP interested in broadening their scope of practice. Given that an expanded skillset would provide a higher level of care to the community, it is the objective of this Master Plan that HPS encourage and support existing PCPs to be certified in autonomous intravenous and administering additional medications. Not only will this result in more paramedics being able to perform more procedures, having more PCP AIVs would enable ACPs to be more available to tend to the most critical patients who require advanced level of care.

In addition to supporting existing PCPs to become certified in PCP AIV, the Master Plan further recommends that certification in PCP AIV be added as a condition of employment for new paramedic recruits. Over the course of this ten-year Plan, it is anticipated that most, if not all PCPs will become certified. With an increase in the number of ACPs as recommended previously and an increase in PCPs becoming certified to administer additional treatments at the level of PCP AIV, HPS will be better positioned to meet the medical needs of patients no matter the severity of their condition or where in the city they are located.

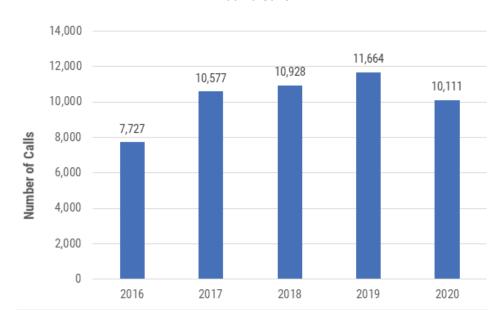
International Trauma Life Support

International Trauma Life Support (ITLS) is a global not-for-profit organization focused on the education of managing trauma emergencies outside of the hospital. ITLS is accepted internationally as the standard for pre-hospital trauma care and is considered a best practice among paramedic services in Ontario. The City of Toronto, Niagara Region and York Region currently provide ITLS training to their paramedics.

Trauma refers to the sudden onset of physical injuries that require emergency medical attention or intervention to prevent death and disability. Physical trauma can occur due to falls, vehicle accidents, burns, violence, animal attacks and other such unforeseen injuries or events. Currently, HPS actively transports trauma patients to two trauma facilities in Hamilton: Hamilton General Hospital for adults and McMaster Children's Hospital for infants, children, and youth. From 2016 through 2020, HPS had 51,007 calls for patients with traumatic conditions, making up 15% of all 911 events during this period.

In a city with a growing and aging population, urbanization of rural areas, events and natural features that attract large numbers of people, and an increasingly busy transportation network, HPS is experiencing an increase in call demand year over year including an increase in trauma emergencies. A slight decrease in 2020 trauma calls can be attributed to the decline in overall calls during the onset of the pandemic.

Hamilton Paramedic Service Trauma Calls



Considering the growing number of trauma events, almost 51% from 2016 to 2019, Hamilton paramedics would be best equipped to care for trauma patients with the specialized ITLS training. ITLS training will ensure that paramedics are able to perform rapid assessments, appropriate intervention, and immediate identification of life-threatening injuries. ITLS also provides a standardized approach to trauma care that aligns with that taken by hospital trauma unit physicians. This continuity in care from pre-hospital to hospital can save critical time, decrease the number of missed injuries and reduce complications of multiple trauma. In fact, in Ontario in 2011, an inquest into a fatality caused by traumatic injuries during a vehicle collision led the coroner to recommend that the curriculum of paramedic education be examined to ensure adequate trauma care and that ITLS be a mandatory continuing education program for all paramedics across the province.

At present, college paramedic programs in Ontario do not include ITLS courses. Thus, the onus is on the service to provide ITLS training to their paramedics. HPS has recently received an offer from the Centre for Paramedic Education and Research (CPER), the base hospital responsible for medical delegation of Hamilton paramedics, to provide medical oversight for the ITLS program. It is the position of CPER that the standard of care is maintained and enhanced through this training.

The benefits to providing ITLS training to paramedics during their continuing medical education sessions are numerous:

- Public funds are utilized on services that will directly benefit the community through the delivery of enhanced quality of care
- Trauma care will not only meet but exceed the MOH Standards given the ITLS is an accredited internationally recognized program
- As one of the few direct delivery agents of the program in Ontario, HPS will have the option to offer this program to other services and generate revenue
- HPS is committed to continually improving its level of service and training all paramedics in ITLS will demonstrate this commitment
- Hamilton paramedics will be given the tools they need to perform to the best of their abilities in any situation and deliver the best care possible to their patients
- ITLS training will ensure a more coordinated approach to trauma care with the local trauma facilities

It is an objective of this ten-year Master Plan that over the coming years, HPS provide ITLS training to all paramedics to ensure the delivery of the highest level of trauma care possible resulting in positive outcomes for trauma patients.

⁹¹ Werman, Nelson, Campbell, Fowler and Gandy. Basic Trauma Life Support. Annals of Emergency Medicine. 1987; V.16(11), p 1240-1243

⁹² https://niagaraatlarge.com/2011/12/22/coroner-inquest-ends-with-recommendations-anzovino-family-feels-satisfied-with

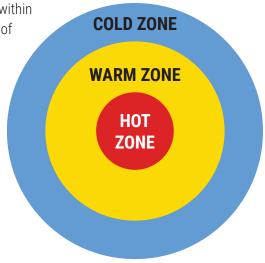


5.6 Specialized Services

OBJECTIVES

- ACQUIRE AN EMERGENCY RESPONSE UTILITY VEHICLE THROUGH THE REALLOCATION OF VEHICLE CAPITAL TO SERVICE EVENTS WHERE THE CONGREGATION OF PEOPLE INHIBITS ACCESS BY AN AMBULANCE
- DEVELOP A FRAMEWORK FOR THE DELIVERY OF SPECIALIZED SERVICES TO INFORM OPERATIONAL AND CAPITAL DECISIONS
- ENGAGE HOSPITAL PARTNERS TO JOINTLY ADVOCATE FOR THE MINISTRY OF HEALTH TO AUTHORIZE AND FUND THE ESTABLISHMENT OF A CRITICAL CARE TRANSPORT UNIT IN PARTNERSHIP WITH ORNGE

During an emergency response there are generally three zones within which first responders operate. The hot zone is at the center of the emergency. First responders who operate in this zone are directly responsible for eliminating the hazard and for rescuing people in this zone. The warm zone still presents risk of exposure to the hazard and is considered not secure or contaminated. As with the hot zone, first responders working in the warm zone are required to have specialized training to deal with the hazard. The cold zone is a secure area where there is no risk to the first responder. This is where paramedics typically receive patients who have been triaged from the hot zone where they would have received limited medical intervention or decontamination.



When paramedics do not operate in the hot and warm zones it limits access to the patient thereby delaying triage, assessment, and treatment of the patient. Furthermore, it can diminish the resources of first responders in these zones who must utilize their resources for patient care rather than for eliminating the hazard or rescue operations.

Having specialized paramedics support other first responders in the hot and warm zones enables these agencies to focus on their primary responsibilities while paramedics focus on providing immediate medical care to patients.

With the appropriate equipment and training, HPS will be able to provide the critical medical support required in unique events such as:

- High risk law enforcement operations
- Hazardous Materials (hazmat) and Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) incidents
- High angle rescues
- Mass gatherings
- Marine search and rescue operations
- Public order disturbances

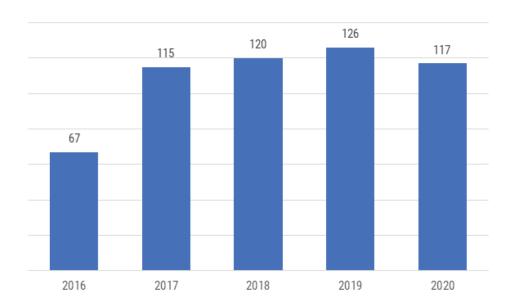
Tactical Paramedics

Tactical paramedics work closely with law enforcement to provide emergency medical care to police officers or civilians who are injured during tactical operations. Tactical operations include a range of dangerous events such as hostage situations, active shootings, bombings, high risk search warrants and the like. Tactical paramedics are highly specialized and trained in a number of competencies including tactical emergency casualty care, police operations, police tactics, CBRNE, K-9 medicine, riot control and explosive unit orientation.

As described earlier, HPS conducted a series of stakeholder consultations to inform the development of this Master Plan. Consultation with Hamilton Police Service revealed a need for tactical emergency medical support for their special operations.

Hamilton Police Service's Emergency Response Unit (ERU) is a highly trained tactical unit that supports police operations in high risk, potentially life-threatening situations. The ERU has been activated 545 times in the last four years in either full or partial deployment. Over 60% or 323 of these calls required paramedics to assist or be on standby.

Hamilton Police Service Emergency Response Unit Tactical Responses 2016 - 2020



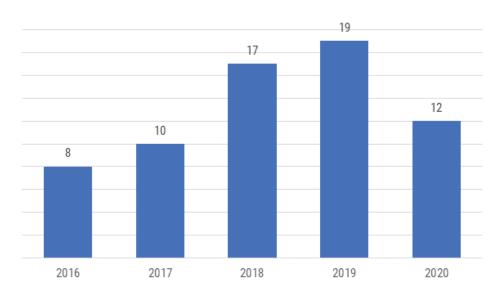
Hazmat and CBRNE

Some of the highest risks to the community as described by the City of Hamilton's Hazard Identification and Risk Assessment Report (2017) or the HIRA Report involve a hazardous material (hazmat). Chemical, biological, radiological, and nuclear and explosives or CBRNE was identified as having a "high" level of risk to the community and as such is ranked number 12 in the HIRA Report. While both risks involve substances that can cause harm to people and the environment, they differ in that hazmat incidents are generally smaller scale and accidental, for example, a chemical release due to an industrial fire or vehicle accident. In contrast, CBRNE events are the deliberate use of chemicals as a weapon for the purpose of causing harm. As a result, the lead agency may be either the fire department for hazmat responses or police services for CBRNE incidents.

Emergency response from paramedics in both situations would be similar. Paramedics can provide medical intervention, extrication, and treatment in the hot or warm zones. The National Fire Protection Association (NFPA) recognizes the benefit of medical integration into hazmat events and developed a standard for emergency medical response to a hazmat incident (NFPA 473).

The Hamilton Fire Department's hazmat response team was dispatched to 66 hazmat calls from 2016 to 2020 with an upward trend except for 2020 when the COVID-19 pandemic began.

Hamilton Fire Department Hazmat Calls 2016 - 2020



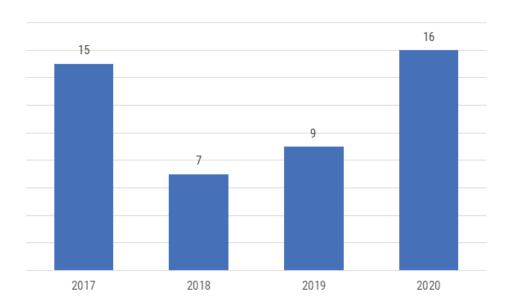
High Angle Rescues

As described in Section 2.0 Hamilton has a unique geography in which the escarpment runs through the length of the city. Hamilton has one of the highest numbers of waterfalls of any urban area of its size and has recently been deemed the Waterfall Capital of the World. This distinction has led to an increase in visitors to the escarpment, its trails, and waterfalls. This has posed challenges for the Hamilton Fire Department responsible to perform rope rescue operations as visitors attempt to get close to the falls or venture off the marked hiking trails. From 2017 to 2020, the Hamilton Fire Department conducted 47 high angle rope rescues.



Source: Hamilton Spectator, G. Yokoyama

Hamilton Fire Department Rope Rescues 2017 - 2020



In 2018, the City of Hamilton erected signs and fencing and enforced fines for people attempting to cross barriers to get to the falls. As a result, there was a decline in the number of high angle rope rescue responses that year. However, these incidents increased in the following year and more significantly in 2020 when lockdowns during the pandemic meant more people began exploring the outdoors.

As most injuries related to high angles rescue are associated to falls from significant heights, injuries are often more severe requiring advanced medical interventions. In addition to the basic medical support provided by firefighters, there is an opportunity to better integrate paramedic response into the rescue to provide earlier advanced medical intervention. Working with the Hamilton Fire Department, paramedics can offer advanced medical interventions to stabilize and comfort the patient while firefighters focus on rescue and/or extrication. These medical interventions include:

- 1. Pain control for fractures with the use of morphine
- 2. Advanced airway and breathing management for unconscious patients
- 3. Intravenous and fluid therapy when there is blood loss
- 4. Other surgical interventions to stabilize respiratory status

Since extrication after a fall often involves tackling difficult terrain causing inadvertent movement of the patient, pain management is crucial in helping the patient be comfortable and calm, which in turn assists the rescue efforts of the firefighters.

Transferring care to a trauma hospital within an hour of a fall is critical to reduce complications associated with injuries in such incidents. However, the average duration for high angle rope rescue in 2019 was almost two and a half hours. Therefore, it is imperative that the patient receive advanced medical intervention by paramedics at the incident until transportation to a hospital is possible.

Mass Gatherings Response

Heavily populated events and festivals often require onsite medical care. Currently, HPS is only able to provide an ambulance to service mass gatherings. The challenge is navigating a large vehicle through the crowd to access the patient. The time it takes for the ambulance to safely make its way through a large and dense group of people could negatively impact the outcome of the patient who may require immediate medical attention. Furthermore, an ambulance parked idle at an event means it is unable to respond to an emergency out in the community, thereby diminishing community resources.

In Section 2.7, a description of Hamilton's arts and culture scene describes a flourishing sector of the economy. This cultural revival has attracted thousands of visitors to the city for a range of events including festivals, fairs, parades, celebrations, competitions, markets, concerts, and street fests. Over 2018 and 2019, the city hosted 56 mass gathering events with an estimated attendance of over 5,000 people per event.

In order to quickly access the patient in a mass gathering, a three-pronged response is required. The first step is to quickly access the patients. Bike Medics are specially trained paramedics on bicycles equipped with a defibrillator, life-support medications and a number of kits to manage trauma, bleeding, and respiratory problems. Due to their agility, Bike Medics can provide a rapid response in large crowds where it is difficult for an ambulance to access.

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The second step in mass gathering response is to extricate the patient from the crowd. This requires a vehicle much smaller than a traditional ambulance. A specially equipped utility vehicle, similar to an all-terrain vehicle (ATV), can maneuver quickly through a crowd and transport the patient out of the area. The utility vehicle carries a range of medical equipment including a stretcher.

Once the patient is extricated from the crowd, the third step is to transfer the patient to a waiting ambulance should they require transport to the Emergency Department. The coordination of resources ensures that the medical care of the patient is continuous from the time the paramedics reach the patient through to the transfer of care to the hospital.

Most paramedic services in Ontario provide rapid response paramedic coverage via bike units and/or utility vehicles for mass gatherings



Source: Guelph Wellington Paramedic Service

events. HPS would be better equipped to serve residents and visitors in Hamilton by establishing a Paramedic Bike Unit and acquiring a medical emergency utility vehicle to reach people in areas that cannot be accessed by a regular-size ambulance.

In 2020 and 2021, HPS submitted applications to community organizations for grants to contribute toward the establishment of a Paramedic Bike Unit. HPS was successful in obtaining almost \$30,000 in grant funds which will be used to acquire bicycles, safety equipment, medical equipment, and training for paramedics. The HPS Bike Unit is expected to be operational in 2022.

A utility vehicle suitable for emergency medical response in Hamilton should be a four-season vehicle that can used in inclement weather. The vehicle will contain medical equipment, a stretcher and room for two attending paramedics. This Master Plan recommends that a utility vehicle be acquired within the first year of this Plan through the reallocation of vehicle capital for economical efficiency.

Marine Unit

A key element to Hamilton's Transportation Network as described in Section 2.5, is the Port of Hamilton, the busiest of all Canadian Great Lakes ports. In addition to the vessel traffic, there is an increase in harbour traffic and on the lake during the summer months with recreational boaters. The Hamilton Police Service Marine Unit is responsible for policing approximately 250 square kilometres of water at the western end of Lake Ontario, including Hamilton Harbour and all other waterways in Hamilton. The Marine Unit conducts rescue operations and law enforcement on the Hamilton Harbour year-round. During the boating season from April through November, the Unit actively patrols the Hamilton Harbour and the western portion of Lake Ontario on a daily basis. Throughout December to March, the Unit conducts ice rescues and responds to marine calls on an emergency basis.

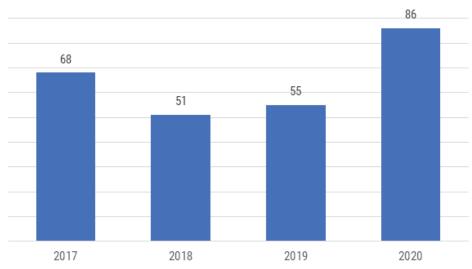


Marine Unit rescue on Lake Ontario Source: Andrew Collins via Twitter

As with many other specialized services discussed in this section, receiving prompt and effective medical care can be a challenge when responding to emergencies on the water. Currently, paramedics wait on shore until police or other first responders access the patient, perform basic first aid then transport the patient back to land to paramedics. As with other emergency situations, the time it takes to retrieve and transfer the patient to the care of paramedics can have a significant negative impact on patient outcome depending on the medical or traumatic condition. As a result, some police services such as Toronto and Ottawa have partnered with paramedic services to integrate paramedic care into police marine units.

Since 2017, the Hamilton Police Service had 260 calls for the Marine Unit related to search and rescue, vessel in distress and ice rescue.





Trained paramedics can provide emergency medical care to people or police officers who become sick or injured in the marine environment. In addition to responding to medical emergencies, paramedics would also participate in delivering public education during routine patrols including such topics as:

- Water safety
- Drowning prevention
- Sun safety (burns, heat exhaustion, heat stroke, dehydration)
- Hypothermia signs and treatment

- CPR awareness
- Allergic reactions and epi-pen use
- Marine/boating First Aid kits
- Using 911

Public Order Unit

Police services will deploy a Public Order Unit (POU) to manage large crowds that gather for demonstrations, protests, or festivals. These gatherings while mostly peaceful may also require managing behaviours to preserve the safety of residents and property. Since the nature of such large-scale events can be unpredictable, the POU provides proactive crowd management to maintain public safety and prevent injuries or property damage. In instances where injuries do occur, having specially trained paramedics integrated in the Unit ensures immediate medical care.

Police services in Toronto, York and Ottawa have trained and equipped paramedics as part of their POUs. Although Hamilton Police Service's POU is not frequently deployed, 45 times from 2016 to 2020, having paramedics trained, equipped and available for integration into the POU provides support for preventative, emergent and urgent medical issues. Paramedics in the hot and cold zones would provide continual medical care from the time the patient is being extricated from the crowd until the care of the patient is transferred to a health care facility.

Unlike many other paramedic services in Ontario, HPS does not have specialized teams to be able to respond to the unique hazards that pose risks to the community. Integrating paramedics into specialized operations when required will result in immediate access to advanced medical care no matter the type of emergency. Furthermore, paramedics participating on specialized teams enable the first responders of the lead agency to focus their attention and resources on executing their core functions rather than performing basic medical care.

Given the range of unique risks that have the potential to cause harm to Hamilton's residents and visitors, this Master Plan recommends that following a review of specialized services required in Hamilton, a framework be developed for the delivery of these services by HPS. This framework will inform operational and capital decisions with regard to acquiring equipment and training for paramedics who participate on special teams.

Critical Care Transport Unit

Hamilton Health Sciences provides specialized regional programs to support hospitals in surrounding municipalities in caring for critically ill patients. These programs include advanced trauma, cardiac, stroke and burn care for both pediatric and adult patients. When a patient at a hospital within the region needs advanced treatment in one of these areas, urgent interfacility transfer is required. CritiCall Ontario is contacted to arrange transport with Ornge, the province's dedicated critical care ambulance service. Ornge's medics are Critical Care Paramedics (CCPs) who have an expanded scope of practice that focuses on intensive care with physician oversight.

From 2017 to 2020, Ornge has transported 610 patients from regional hospitals to the Hamilton General Hospital for advanced care. In addition, over 142 critically ill patients required transport out of Hamilton General Hospital to another hospital in the region.

Ornge Transports To and From Hamilton General Hospital 2017 - 2020



Source: www.ornge.ca/stats-centre/healtcare-providers-statistics

Note: 'Sent' data is an underestimate as number of patients under 5 are not counted

During stakeholder consultations, hospital partners indicated a need for increased capacity for inter-regional transports. Given Ornge operates from just three locations in the region, London, Brampton and Toronto, the distance may result in delays in transporting the patient. For example, if a patient of a Niagara Region hospital requires transport to the Hamilton General Hospital, Ornge would have to travel the distance from London, Brampton, or Toronto to Niagara and then back to Hamilton. In many cases it is crucial that patients be transferred in a timely manner.



Capacity in terms of the number of critical care transport vehicles is also a challenge highlighted during the pandemic when Toronto-based hospitals depended on regional paramedic services to assist with transferring COVID-19 patients to inter-regional hospitals with available beds.

When it is not possible to arrange a critical care transfer when required, hospitals rely on local ambulance services to transport critically ill patients. This requires the hospital's medical staff such as doctor, registered nurse, or respiratory therapist to accompany the patient along with the paramedics resulting in fewer ambulances available for emergency response in the community. It also means fewer medical staff in the hospital for a potentially extended amount of time as they travel with the patient to a hospital in another part of the region. In turn, this can lead to a delay in emergency response and movement through the hospital.

To assist Ornge and provide additional service to Hamilton hospitals, this Master Plan recommends that HPS works with Ornge to establish a Critical Care Transport Unit (CCTU) operated by HPS. The HPS CCTU would be staffed by CCPs which prevents the need for hospital medical staff to accompany the patient during transport. HPS will collaborate with hospital partners to advocate for MOH to fully fund this specialized service.

Special Events Medics

As noted in Section 2.0 describing the City of Hamilton profile, Hamilton is home to national and local sports teams, host to many large-scale events such SuperCrawl and has a burgeoning film industry. HPS has been contracted by vent organizers to provide stand-by paramedic services for many of these events particularly for the film and sports industries. HPS brings on additional paramedics and utilizes a spare ambulance or ERV to provide care in dealing with serious accidents or minor injuries, illnesses and aliments that may occur during these events.

On average, HPS has entered into 18 contracts per year with the majority being with the film and sports industries. To date, these organizations have initiated contact with HPS having learned of the fee-for-service through word of mouth or via a online form on the HPS website.

As part of a framework for the delivery of specialized services, HPS will develop a more proactive and structured approach to seek and secure opportunities to provide services for special events and generate income. This includes coordinating with the City of Hamilton's Music and Film Office and other key partners to promote the availability of paramedic service support.



Supercrawl



Ice storm 2013 Source: Hamilton Spectator, G. Yokoyama

5.7 Contingency Response Planning

OBJECTIVE

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PARTICIPATE IN DISRUPTIVE AND DISASTROUS EVENT PREPAREDNESS EXERCISES WITH COMMUNITY AND EMERGENCY RESPONSE PARTNERS INCLUDING ANNUAL EMERGENCY OPERATIONS CENTRE (EOC) EXERCISES BASED ON THE HAZARDOUS INCIDENTS IDENTIFIED IN THE HAZARD IDENTIFICATION AND RISK ASSESSMENT (HIRA) REPORT

HPS is responsible to deliver pre-hospital assessment, treatment, and transport services to a city of over half a million people. Section 2.0 describes the profile of Hamilton as having a unique and varied geography, a significant industrial sector, the largest port in Ontario and an influx of students and visitors for the school year and during many large-scale festivals and events. In addition, with an increasing awareness of disastrous events globally, such as those related to extreme weather and mass violence, HPS must prepare to provide a wide range of paramedic services to meet the increasingly diverse needs of the city.

The City of Hamilton's Emergency Management Division reports the top risks to the community in the Hazard Identification and Risk Assessment Report (2017). Based on past occurrences and the potential impacts of each hazard, the HIRA Report identified the following top ten hazards in Hamilton:

Hazard	Lead Agency	Level of Risk
Hazardous Materials Incident/Spills – Fixed Site Incident	Hamilton Fire Department	Extreme
Flooding	Public Works	Extreme
Hazardous Materials Incident/Spills – Transportation Incident	Hamilton Fire Department	Extreme
Human Health Emergency	Public Health Services	Extreme
Energy Emergency (Supply)	Public Works	Extreme
Extreme Ice Storm	Utilities Provider	Extreme
Explosion/Fire	Hamilton Fire Department	Very High
Transportation Emergency – Rail	Hamilton Fire Department	Very High
Critical Infrastructure Failure – Telecommunications	Communications Provider	Very High
Active Shooter/Violent Situation	Hamilton Police Service	Very High

While HPS is not the lead agency for the identified hazards, in almost all cases paramedics are required to fulfil a major role. These hazards represent major incidents that involve multiple locations or that have a significant impact on City operations, facilities, or infrastructure. There is also the possibility of a significant impact on the public which may include people requiring emergency medical attention.

Trends in hazards across the city indicate an increase in the number of the following disastrous events: 93

- Flooding due to weather events, overwhelmed or failed infrastructure, overwhelmed natural features after large rain event and rising lake levels
- Extreme heat and the number of days of extreme heat
- Landslides along escarpment
- Severe wind/tornadoes
- Human health emergencies (e.g., 2009 H1N1 pandemic, 2020 COVID-19 pandemic)
- Severe ice storms

⁹³ Email correspondence from Emergency Management Coordinator, March 28, 2018

As a result of climate change, there is expected to be a rise in the intensity, duration, and frequency of precipitation events, both snow and rain. Climate change also causes an increase in the frequency and intensity of windstorms and ice storms.

Taking measures to predict, prepare or even prevent such hazardous events in the community helps to reduce the effects of the disaster. Conducting exercises that simulate emergency events with first responders, lead agencies and government builds preparedness in the following ways:⁹⁴

- Validate response plans, policies, and procedures
- Test equipment and training
- Clarify roles and responsibilities of individuals and agencies
- Enhance inter-agency coordination and communication
- Identify gaps and areas requiring improvement
- Improve performance through practice

It is essential to be prepared to respond to potentially devastating events to mitigate the impacts and aid in recovery. It is therefore recommended that HPS help to initiate, coordinate, and participate in annual disaster preparedness exercises led by the City of Hamilton's Emergency Operations Centre. Such exercise will be based on the hazards identified in the HIRA Report. Furthermore, HPS should seek to organize and participate in other disruptive event preparedness exercises with first responders and community partners including hospitals, airport, and health care to build preparedness for scenarios such as public disorder, building collapse, mass evacuation or overdose epidemic.

⁹⁴ Emergency Management Ontario, Minister of the Solicitor General, Guidelines for the Development of an Exercise Program https://www.emergencymanagementontario.ca/english/emcommunity/program_resources/exercise/exercise_guidelines_main.html

5.8 Logistics and Planning

OBJECTIVES

- COMPLETE A THOROUGH REVIEW OF THE LOGISTICS AND PLANNING SECTION TO ENSURE RESOURCES AND CAPABILITIES MEET CHANGING AND GROWING DEMANDS OF THE SERVICE INCLUDING PREPAREDNESS FOR DISRUPTIVE INCIDENTS FOR HPS AND THE CITY OF HAMILTON'S HEALTH CARE DIVISIONS:
 - A) ADD LOGISTICS PERSONNEL TO MANAGE AN INCREASED WORKLOAD AS A RESULT OF ENHANCEMENTS TO FRONTLINE SERVICES
- 19 INVESTIGATE ASSUMING RESPONSIBILITY FOR PROCURING AND MANAGING MEDICAL SUPPLIES FOR CITY OF HAMILTON'S LONG-TERM CARE HOMES AND HAMILTON PUBLIC HEALTH SERVICES
 - A) ACQUIRE WAREHOUSE SPACE TO ACCOMMODATE THE CENTRALIZATION OF MEDICAL SUPPLIES FOR CITY OF HAMILTON DIVISIONS PROVIDING HEALTH CARE
 - B) EXPLORE THE POSSIBILITY OF PROVIDING RESPIRATOR TESTING FOR CITY OF HAMILTON DIVISIONS WHERE EMPLOYEES REQUIRE RESPIRATOR MASKS
- 20 IMPLEMENT A COMPREHENSIVE ASSET MANAGEMENT SYSTEM TO EFFECTIVELY MANAGE INVENTORY OVER THE LONG TERM FOR HPS AND THE CITY OF HAMILTON DIVISIONS WHERE APPLICABLE
- DEVELOP A 'CLEAN AND GREEN' PLAN TO REDUCE THE CARBON FOOTPRINT OF HPS THAT INCLUDES EXAMINING THE FEASIBILITY OF ACQUIRING HYBRID OR ELECTRIC POWERED VEHICLES AND IMPLEMETING WIRELESS CHARGING STATIONS

BULAN

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The Logistics and Planning section is responsible for managing HPS's assets and information systems by performing the following activities:

- Life-cycle management of HPS vehicles, material and equipment, including procurement, distribution, inspection, cleaning, maintenance, minor repairs, and disposal
- Information systems administration and management of operational computer hardware and operational applications
- HPS information and data custody and management, including collection, collation, analysis, and presentation
- Coordination of facilities usage
- Logistics and support systems management, analysis and development and coordination of support by external organizations and entities
- Management of medical supply inventory
- Inventory control of medical supplies at stations

Logistics and Planning plays a critical role in the operations of HPS by providing paramedics with the tools and support that are essential to delivering quality patient care. This section of HPS ensures that paramedics have clean, operative vehicles stocked with medical supplies, pharmaceuticals, and well-functioning patient carriage equipment in accordance with provincial standards. The Logistics and Planning section ensures HPS vehicles have up-to-date technology for reliable communication and access to critical data. This section is also responsible for providing paramedics with uniforms and personal protective equipment and helps to resolve any facilities issues at stations. Logistics and Planning also operates records management and information systems to monitor and evaluate data related to operational performance, quality assurance, paramedic training and performance and cross border ambulance activity.

There are a number of partners HPS relies on to assist with a variety of logistics activities:

- City of Hamilton, Public Works Department, Facilities Management and Capital Programs performs facility maintenance and repair
- City of Hamilton, Corporate Services Department, Information Technology Services provides a variety of technology equipment, software, and administrative support
- City of Hamilton, Hamilton Fire Department, Mechanical Division services HPS vehicles and select equipment
- City of Hamilton, Corporate Services Department various divisions assist with HPS logistics activities including the Procurement Division and Legal and Risk Management Services Division
- External agencies a number of external vendors are required to maintain specific HPS equipment such as cardiac monitors (Zoll), stretchers (Stryker) and dispatch radio system (MOH)

Vehicle and Equipment Maintenance

The Logistics and Planning section is responsible for ensuring all vehicles are specially configured, equipped and maintained to conform to the *Provincial Land Ambulance and Emergency Response Vehicle Standard, the Provincial Equipment Standards for Ontario Land Ambulance Services*, and the Ambulance Service Review.

As described in Section 3.2, through the Ambulance Service Review (ASR), the MOH evaluates compliance with these Standards. An audit of almost 70 requirements related to logistics such as vehicle and equipment maintenance and cleanliness is undertaken every three years. Failure to meet the Standards can result in the Service's land ambulance license being revoked.

Logistics Technicians are responsible to conduct regular inspections of medications, vehicles, and equipment. They must routinely clean vehicles and ensure they are stocked with the required medication and supplies and perform preventative maintenance of equipment. The current service standard based on logistics staffing capacity is to complete this process every 90 days although the industry best practice is at least monthly.

Furthermore, logistic technicians are responsible for stocking, maintaining, and cleaning paramedic response bags which hold medical equipment that paramedics carry to an incident. In total, HPS has over 1,000 response bags, medical kits and pouches. With the onset of the pandemic in 2020, it became even more critical for vehicles and equipment to be cleaned properly and more frequently. Logistic technicians had to increase cleaning activities and conduct a deep clean of all vehicles, equipment, and paramedic response bags after every shift.

Currently, dedicated logistics capacity in HPS is limited to one full-time Stores Clerk and three full-time Logistics Technicians working weekdays and weekends, with paramedic supervisors monitoring logistics activities after hours. Since 2014, HPS has added ten ambulances to its fleet and 100 paramedics. This alone has significantly increased the workload of logistics personnel not only in terms of maintaining and cleaning an expanded fleet and equipment but also managing additional uniform orders and medical supply inventory. In addition, the more frequent and enhanced cleaning required during the pandemic along with managing additional medical supplies such as PPE has increased an already heavy workload for logistics personnel.

HPS would like to move a cycle of comprehensive maintenance every 30 days to be in line with the industry best practice. However, managing an expanding fleet and increasing number of paramedic staff with the current complement of logistics personnel makes it difficult to achieve the Standard of completing this process, even every 90 days.

Being unable to adhere to the standard course of inspections, maintenance, stocking, and cleaning can pose a risk for HPS and the community. Expired medications and failed equipment can result in adverse patient outcomes. Contamination and contagions are potentially dangerous results of inadequate cleaning of vehicles and equipment. Failure to comply with the provincial vehicle and equipment Standards may be considered a violation of the Regulations and Standards issued pursuant to the *Ambulance Act*.

A thorough review of the Logistics and Planning Section is recommended by this Master Plan. Such a review will identity resources and capabilities required to meet changing and growing demands. Additional logistics personnel will be required to manage the increased workload as a result of additional ambulances, equipment, and paramedics prior to the pandemic which further burdened logistics personnel. Moreover, additional logistics technicians will be required to manage an increased inventory of medical supplies for the City of Hamilton in a centralized model as recommended below.

A review will also ensure preparedness for disruptive events such as the pandemic which increased the workload pressure of Logistics and Planning personnel who are essential to the operation of the service. Furthermore, as will be outlined in Section 6.0, a facilities review is recommended that will include logistics requirements. As such, a review the Logistics and Planning Section will include the logistics requirements identified in the facilities review.

Centralize Medical Supplies

The Logistics and Planning Section also manages medical supply inventory including procuring, storing, tracking, updating and distributing such supplies as pharmaceuticals, medical consumables such as syringes, needles, personal protective equipment (PPE) and medical equipment such as cardiac monitors and blood analysis systems. In addition to HPS managing its own medical supplies, it also handles the medical supply requirements of the Hamilton Fire Department (HFD). This prevents duplication of efforts, supports appropriate fire services-tired response to certain medical emergencies and creates cost-efficiencies by purchasing in bulk.



During stakeholder consultations, City of Hamilton partners expressed a desire for HPS to take control of purchasing, stocking, and tracking medical supplies. The City's long-term care homes, Hamilton Public Health Services and to some extent the HFD all have their own inventory of similar medical supplies to that of HPS. Localized purchasing makes uniformity in processes and prices of materials more difficult to achieve. Duplication in purchasing materials, loss of benefit of bulk purchases and additional administrative work are drawbacks resulting from divisions controlling their own medical supply inventory.

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With the onset of the pandemic in March 2020, disadvantages to this localized approach to purchasing were amplified. During the early stages, municipalities, cities, and regions scrambled to secure PPE to ensure the safety of staff who provide critical services to the community. Federal and provincial PPE reserves were non-existent leaving municipalities competing for limited supplies from outside of the country. Several divisions within the City of Hamilton worked independently to try to secure PPE which presented the following inefficiencies:

- Several divisions competing for the same supplies from the same vendors
- Duplication of efforts as more than one employee performs the same task
- Loss of potential savings by not purchasing in larger quantities



The limited supply of PPE available to City employees meant some divisions had to institute a recycle/reuse program by cleaning PPE when possible and reserving the use of PPE unless it was essential. As noted earlier, the HFD reduced the number of medical responses to preserve PPE for paramedics. HPS's logistics personnel designed a program that enabled isolation gowns to be reused which was implemented for all City of Hamilton medical staff.

In addition to the challenges acquiring an adequate supply of PPE, complications in providing respirator testing also arose. The City of Hamilton as an employer is required to administer a fit test for employees who wear respirator masks such as an N95 to prevent infectious and hazardous agents from being inhaled. A fit test verifies the mask is the right size, creating an effective seal for the proper level of protection. Issues related to fit testing emerged during the early stages of the pandemic, including:

- Contractors used by some divisions for respirator testing were not available due to high demand
- For divisions that had the technology to conduct respirator fit testing in-house, related consumable supplies were difficult to obtain due to challenged logistic chains
- Lack of uniformity in testing methods used by divisions led to uncertainty about which method was most accurate

These challenges can be overcome should HPS become the sole provider of respirator testing for all divisions where employees are required to wear respirator masks. This Master Plan recommends that such an arrangement be explored.

As the pandemic progressed and vaccines became available challenges emerged obtaining adequate supplies of vaccines and consumable materials like syringes and needles. Similar to the issues experienced in securing PPE, divisions were simultaneously yet independently procuring vaccination supplies.

To address these challenges, several City divisions including the procurement office collaborated with the leadership of the Emergency Operations Centre to put into place the following solutions:

- A central supplies depot was established to coordinate and procure PPE and vaccine supplies for the entire city staffed by redeployed employees
- Divisions with established respiratory protection programs for fit testing were able to assist other divisions that depended on third party vendors

With these measures in place, HPS has been able to maintain a six-month supply contingency creating a readiness for any future disruptive events.

The pandemic has highlighted issues related to localized procurement and management of medical supplies. During a global health crisis, divisions within the City were in a position of competing for medical supplies. While the solutions implemented have been successful in mitigating these issues, they are temporary. The central supplies depot is scheduled to close in April 2022 and staff redeployed to the depot and to assist divisions with fit testing will return to their permanent positions.

Centralizing purchasing and management of medical supplies for City divisions providing health care would allow for more comprehensive control and optimization of inventory including management of supplies with expiry dates. Centralized record-keeping of orders and inventory helps to avoid under and over-stocking. Centralized purchasing will enable the use of computerized systems to automate the procuring process which can be integrated with accounting and stock control. Duplication of efforts and competition for supplies among divisions would be avoided with a centralized model. Purchasing in volume for multiple divisions has the potential to generate greater discounts. Furthermore, centralized purchasing is helpful to vendors as they can coordinate and deliver goods to a single buyer instead of many buyers. Finally, a centralized model would enable HPS and other divisions to be better prepared for future disruptive events by ensuring an ongoing perpetual six-month supply of essential medical materials is maintained with minimal waste.

Thus, this Master Plan recommends that HPS investigate the possibility of assuming responsibility for procurement and management of medical supplies for City of Hamilton's long-term care homes and Hamilton Public Health Services. HPS would control the procurement, storage, and management of and inventory of medical supplies for City divisions providing health care. HPS would be the central point of medical supplies for the City and issue supplies to respective divisions as needed. This would necessitate a logistical space large enough to house supplies of these City divisions. The current space for HPS inventory at Station 30 is inadequate for storing additional supplies of other divisions and given that the City's temporary supplies depot will close in 2022, a new logistical space is required large enough for the increased inventory. It is recommended that within the first year of this Master Plan, HPS acquire warehouse space that will accommodate the centralization of medical supplies for City divisions providing health care. Details on this facility are discussed further in Section 6.0 Facilities

Asset Management

The Logistics and Planning Section is responsible to track all assets of HPS including an inventory of medical supplies and equipment and vehicles. Such assets are vital to the day-to-day operations of the service and need to be managed accurately and tracked in real-time.

Logistics and Planning has had limited access to a records management system. This means stock is issued without packing slips or a method of tracking available stock, past usage, backorders, or out-of-stock items. Manual records, including whiteboards and multi-user spreadsheets have been used to track drug expiry, equipment servicing intervals and other critical logistics' information.



In 2020, it became more important than ever for HPS to proactively manage assets as an evolving health crisis resulted in a global shortage of medical supplies. To ensure an adequate supply of medical inventory and equipment, especially when supply chains are disrupted, Logistics and Planning personnel began the process of transitioning to a computerized system. This modernized system tracks real-time supply levels and accurately forecasts supplies required to ensure critical stock is readily available and up to date.

Having a reliable, effective, and efficient inventory management system will help reduce costs and limit waste by preventing stock from expiring or being overstocked. It also supports patient care by having the right supplies and medications available when needed. A computerized management system will automate the procurement process and can be integrated with other systems such as accounting.

A robust asset management system is also required should HPS move to a model of centralized control of medical supplies for multiple City of Hamilton divisions, as discussed in the previous section. With more supplies being purchased, stored, and distributed to more locations, utilizing a computerized system will simplify the complexity that comes with managing increased inventory for multiple users.

It is essential to accurately track assets in order to effectively manage inventory and equipment. It ensures that paramedics have the tools they need to deliver quality patient care. As such, this Master Plan recommends that a comprehensive asset management system is fully implemented and can fulfill the evolving needs of the service over the long term including the potential to manage the medical inventory for City of Hamilton divisions.

Clean and Green Plan

In 2019, the City of Hamilton declared a climate change emergency and committed to developing a plan to achieve net-zero carbon emissions by 2050. The Community Energy and Emissions Plan sets out to reduce greenhouse gas (GHG), improve energy efficiency while also meeting Hamilton's future energy needs. The plan encompasses all aspects of energy use and GHG emissions including homes, industry, waste, and transportation.

As a predominantly vehicle-based service, HPS has a different carbon footprint than many other health care providers in the city. As HPS's demand for services increases and additional ambulances are added to the fleet, the amount of travel and fuel consumption increases. Distance travelled decreased slightly in 2020 from 2019 due to the decline in service demand during the first few months of the pandemic. From 2018 to 2020, HPS consumed a total of 1,886,197 litres of fuel purchased at a City of Hamilton facility.

Voor	Vilometree Trevelled	Litres of Fuel Used			
Year	Kilometres Travelled	Gasoline	Diesel		
2018	1,834,070	614,074	827		
2019	1,909,099	632,285	414		
2020	1,887,557	637,423	1,174		
TOTALS	5,630,726	1,883,782	2,415		
TOTAL LITRES		1,886	5,197		

Fuel amounts rounded to nearest whole number.

In an effort to reduce the carbon emissions resulting from the fuel used by vehicles, HPS replaced two decommissioned ambulances with new hybrid ones in 2020. Not only does this hybrid technology reduce carbon emissions, it requires less fuel for the same distance saving on the cost of fuel while increasing mileage. It is estimated that this technology will be able to successfully reduce greenhouse gas emissions by 10.7 tonnes per vehicle each year.

In addition, all ambulances have anti-idling technology designed to control and monitor engine idling. Ambulances must be temperature controlled to preserve the pharmaceuticals they carry. Prior to installing this technology, ambulances' engines would have to run constantly even when an ambulance was stationary. Anti-idling technology automatically turns the engine off and on to maintain the interior temperature and charge the battery. This ensures the temperature requirement of the medications are maintained and patients are comfortable. Furthermore, anti-idling also saves fuel, reduces carbon emissions, and extends the life of the vehicle's charging system components. As this technology advances to include more functionalities such as solar powered idle reduction systems, HPS will consider updating ambulances.

During the beginning stages of the pandemic, logistics personnel designed and implemented a program to fulfill the City of Hamilton's need for medical isolation gowns which were in short supply. These are one-use gowns worn as part of PPE to protect the wearer from contact with pathogens such as the COVID-19 virus. Logistics established an arrangement with a uniform manufacturer to pivot their operations to make medical gowns. The manufacturer repurposed the material they used for uniforms to make medical gowns. Moreover, logistics personnel arranged for the cleaning and sterilization of the gowns so they could be reused. This ensured that all City of Hamilton staff who required medical gowns during the pandemic had access to them while reducing the need to dispose of one-use gowns.

HPS is committed to reducing GHG emissions to protect Hamilton's environment and contribute to creating a healthier community. As such, an objective of this Master Plan is to develop a 'clean and green' plan for HPS that advances the City's goal of achieving net-zero carbon emissions by 2050. A clean and green plan for HPS will align with and support the City's Community Energy and Emissions Plan. It will determine the current state of HPS's carbon footprint through a GHG audit to identify areas for improvement and establish actions to lessen HPS's impact on the environment. It also requires examining environmental trends, policies, green plans of other organizations and sustainability trends including the use of technology to mitigate climate change. HPS's clean and green plan will investigate the feasibility of replacing decommissioned ambulances with fully electric powered or hybrid ambulances. Furthermore, the plan will explore the technology of wireless electric charging stations for stationary ambulances located at HPS stations and hospitals. The plan will also consider utilizing LEED (Leadership in Energy and Environmental Design) certification to ensure any new and existing HPS buildings are green, highly efficient, and healthy.

the carbon footprint



5.9 Information Technology and Data Management

OBJECTIVES

- DEVELOP AN IT STRATEGY BASED ON A COMPREHENSIVE REVIEW OF IT AND DATA MANAGEMENT INFRASTRUCTURE (BOTH HARDWARE AND SOFTWARE)
 TO IMPROVE OPERATIONAL EFFICIENCY
 - A) ACQUIRE SMARTPHONES FOR ALL PARAMEDICS WITH ADVANCED TECHNOLOGY TO INTEGRATE WITH DISPATCH SYSTEMS, ACCESS ELECTRONIC PATIENT CARE RECORDS (EPCRs) AND WORKPLACE SAFETY APPLICATIONS
- WORK WITH THE PROVINCE AND THE GREATER HAMILTON HEALTH
 NETWORK TO LEVERAGE AND INVEST IN TECHNOLOGY TO BETTER
 INTEGRATE RECORDS TO ACHIEVE A ONE PATIENT, ONE RECORD APPROACH
 TO PATIENT CARE
- IMPROVE INTEGRATION AND UTILIZATION OF VIRTUAL CARE PLATFORMS IN PARAMEDIC PATIENT CARE

Data Generation and Usage

Providing quality, cost-effective services requires making good decisions based on accurate data. Since 2013, HPS has made significant improvements in the development of systems for the collection, storage, analysis and reporting of data. These systems are essential to guide operations and fulfill regulatory requirements. HPS collects data for the following key purposes:

- Decision-making
- Describing
- Influencing
- Monitoring

- Informing
- Predicting
- Sharing
- Reporting

HPS takes the approach that questions about the business should drive the need to generate specific data, rather than gathering extensive and arbitrary data from which questions are subsequently determined. HPS employees use the following to guide them when generating data:

- 1. What operational question needs to be answered?
- 2. What type of analysis will be required to answer the question?
- 3. What data is needed for the analysis to answer the question?

Generating and utilizing quality data is critical to emergency medical services as it can identify trends and new ways to improve operations and patient care. Without proper data there is no ability to review what has been done and identify how to improve performance moving forward. Good data provides the information to make systems more efficient and in turn contributes to a positive outcome for patients.

HPS has been a leader in coordinating the use of data for a more effective system evaluation at both the local and provincial levels. In 2019, HPS initiated an effort to standardize key performance indicators for land ambulance services in Ontario. In coordination with other paramedic services in the province, key indicators are being identified and defined to produce standard baseline measures. This will enable all services across the province to evaluate and report on performance using the same KPIs. Standardized KPIs will make direct comparisons among services possible and provide a provincial baseline with which to gauge the performance of HPS. This work will be completed in late 2021 with plans to have these standardized KPIs adopted by the MOH for province-wide reporting.

To ensure HPS continues to generate robust quality data to improve the efficiency of systems and the delivery of patient care, more advanced software and hardware must be considered.

Information Technology

HPS utilizes a variety of IT hardware and software required for deployment activities, monitoring performance and regulatory requirements. Where possible, HPS partners with internal and external stakeholders to develop Information Technology (IT) systems. In this way, HPS is able to develop progressive IT solutions to increase operational efficiency in a cost-effective way. IT systems developed in collaboration with partners include:

Interdev Technologies

Provides mobile software for electronic patient care records (ePCR), Computer Aided Dispatch (CAD) Link to ensure paramedics receive dispatch data instantly and plots the fastest route to the scene, a dashboard website of real-time call data and various reporting tools. Interdev also supports secure feed of call data to FirstWatch (described below).

Response Dashboard

Through a partnership with Ottawa Paramedic Service, HPS was able to display real-time performance metrics of both paramedics and hospitals. This was replaced in 2021 by the Situational Awareness Dashboard (SAD) provided by Interdev Technologies.

Statistical Software

The Centre of Disease Control (CDC) offers a free (but limited) software program called Epi Info for public health practitioners and researchers. HPS utilizes this software to record and analyze information on MIH clients.

Darkhorse Analytics

A suite of software tools customized for HPS to conduct diagnostic and predictive analysis of response performance that can be viewed both temporally and spatially on a map of Hamilton.

Integrated Decision Support (IDS)

A collaborative sharing solution with a network of health providers across the province who exchange data about the care of shared patients. This builds on an integrated care model creating efficiencies, optimizing data, and improving quality and performance.

FirstWatch

This early event detection system interfaces with the different data systems utilized by first responders and analyzes data against customized criteria to provide real-time syndromic surveillance, situational awareness, operational analysis and alerting ability. Turning data into useful information in real-time enables informed, data-driven decisions to be made promptly.

ClinicalConnect

A secure, web-based portal operated by Hamilton Health Sciences that provides authorized health care providers access to patients' electronic medical information. This tool helps to bridge the gap between distinct information systems to support integrated health care delivery.

HPS User Profile

The development of a comprehensive profile of people who use land ambulance services in Hamilton is the result of a partnership with the Epidemiology Section of Hamilton Public Health Services.

Automatic Vehicle Location (AVL)

This software is utilized by the Computer Aided Dispatch (CAD) system to enable dispatch to identify the closest vehicle available for the most rapid response.

BeWhere

Software application tracks non-powered and movable assets through sensors to provided real-time information. HPS uses this program to track essential equipment as stretchers, stair chairs, cardiac monitors, suction units, and paramedic response bags. The software is integrated with the AVL system and provides real-time information of these assets.

Software is used on a variety of equipment utilized by paramedics. In addition to 22 desktop computers located at each station, HPS has approximately 118 rugged laptops mounted in ambulances with specialized software. These laptops are removable so paramedics can access and populate patient information in ePCRs on scene. Additionally, MIH Community Paramedics utilize tablets, six in total, to document program activities and client interactions while in the field.

Paramedic crews also utilize two-way radios in ambulances and at stations to receive call information from dispatch. However, advancements in technology allows for apps on smartphones to receive details of a call directly to paramedics' cell phones. As a result, paramedics do not have to be close to the radio or laptop and can get details on calls wherever they are. This technology also allows paramedics to access ePCRs and patient care plans on their phones. Thus, they can conveniently refer to this information when in the field with a patient or working with Emergency Department personnel. The immediate availability of information can save time in getting to and caring for a patient. Paramedics can also obtain patients' e-signatures on their phones. Smartphone technology enables paramedics to communicate directly with each other and other health care providers, individually or in groups, by text or video to gain easy access to additional supports and readily share information.

Currently, HPS Community Paramedics have smartphones that utilize this technology. Readily accessing a client's medical information on a device with specialized features that can fit into a pocket has helped to support the service Community Paramedics provide their clients.

Their smartphones also contain a workplace safety application with a panic alarm. This application will track the user's location through GPS and at the press of a button signals an emergency so support can be sent directly to their location. Community Paramedics usually work alone and often in someone's home, so this technology helps protect them in the face of possible danger or to prevent the escalation of harm.

Through the development of an IT strategy, as discussed below, this Master Plan recommends that smartphone devices with such progressive capabilities be available for all frontline paramedics to enhance their performance in caring for their patients and to protect their safety.

HPS depends on at least 24 varieties of software and/or databases to manage operations and is responsible for approximately 42 different tracking and reporting functions.

The following chart of data inventory illustrates the purpose of some of the software and databases utilized by HPS.

AVL	ADRS	People Soft	ePCR	LMS	Survey Monkey
Response data	Response data	Employee Info.	Patient charting	On-line training	Tuition reimburse
					Internal postings
					Veh. Check
					Paramedic Feedback

FDM	Shared Drives	Hard Copy	Arcabus	Parklane	HES.NET
Personal Info.	All documents	MOH credentials	Facility repairs	Employee injuries	Memo tracking
Veh. Maintenance	Incident reports				
MOH credentials	MOH credentials				
Equip. Inventory	Paramedic portal				

Time manager	EMS Narc	Track my AED	Docusign	Pre-Hos	Darkhorse
Employee sched.	Drug tracking	AED tracking	Tuition reimburse.	CP charting	Predictive analytics
		Expiry tracking			

Tracking and Reporting Documents (spreadsheets)							
BLSPCA ED OLD time Peer support OT details Tuition reimburse Service statist							
RTCP	Call feedback to staff	Grievances	Emp. Injuries	Sup. CQI	Seniority list		
Fit to sit	PR/media tracking	Missing documents	Veh. Maintenance	Facility deficiencies	uniform orders		
Equip. maintenance							

Although these software and databases can be considered progressive, in many cases the acquisition of data involves manual processes through workflows that are cumbersome, inefficient and lack integration. This often results in one or more of the following issues:

- Reduced productivity and increased cost as additional resources are required for tasks that can be automated
- A need to make modifications to achieve to meet operational requirements
- Risk of not complying with legislative obligations due to lack of accurate information

Not only are there limitations with current software, the IT infrastructure on which HPS currently relies is further limited in the following ways:

- Inability to integrate databases within HPS
- Free software is limited, and enhanced features requires additional licensing at a cost
- Documents stored on hard drives have little to no protection from being deleted
- By-laws for records retention are difficult to enforce, as most software does not have built-in retention programming
- Lack of secure documents due to a cumbersome process to restrict access
- Lack of integration and access to data in other areas of the organization
- Limited ability to integrate with the broader health care system

In order to continue to deliver optimal service to the community now and into the future, HPS's IT infrastructure must continue to evolve. HPS must review the trends in future technology, particularly IT, that is utilized in the health care field. HPS investment in IT infrastructure must meet current and future needs and align with the broader health care system to ensure systems can be integrated. Therefore, an objective of this Master Plan is to develop an IT strategy that considers the following areas of IT infrastructure:

- Hardware that is updated, reliable and allows for the accurate and convenient collection of data
- Software that is secure and automates workflows and data generation
- Ability to connect with other systems inside and outside of the organization
- Data storage that allows for access to analytics software (for HPS and all City Departments)
- Analytics and reporting software for real-time systems

The development of an IT strategy to improve operational efficiency and in turn, patient care, must include a comprehensive review of the current state of HPS's IT and data management infrastructure to determine gaps, duplications, and opportunities to optimize existing systems and equipment. The strategy would also require an environmental scan to identify trends in technology, particularly in the health care field. A review of systems utilized by key City of Hamilton and community partners should be undertaken to ensure connectedness among systems is possible. It is also important to have knowledge of the plans key partners have for their IT investments into the future, so that the IT strategy developed by HPS aligns with the direction taken by others in the field. The strategy will consider ways to optimize current resources and leverage available IT resources through partners to meet IT requirements in a cost-effective manner.

Elements of an IT Strategy

Assess Current State	Conduct Environmental Scan	Determine IT Requirments	Establish Investment Plan	Develop Implementation Plan
Identify gaps, duplications and ways to optimize existing IT-related resources	Identify trends in IT and the health care field Identify IT plans of key partners	Identify software and hardware needs consider future needs and how to meet these needs (e.g. optimize existing resources, leverage resources through partnerships and purchase resources)	Identify the costs asscoiated with the IT requirements	Identify timelines and activities for implementing IT requirements using a phased approach

One Patient, One Record

An IT strategy for HPS must consider what is required to advance toward a health care system that is well-integrated. Connected and coordinated care that puts patients first is necessary to achieve the best possible outcome for a patient. As first responders and health care providers, paramedic services are an integral part of the health care system. Integrating systems, sharing data, and coordinating information must occur among paramedics, hospitals, clinics, Ontario Health Teams, primary care, Home and Community Care Services, long-term care, mental health care and other health care partners to create a seamless response to patient care.

Although there has been progress in integrating the health care system in Ontario with respect to coordinating access to patients' electronic information among some health care providers, the patient's care journey remains fragmented. The following scenario illustrates what a patient may currently experience.

Nazer is a senior who lives alone and whose primary language is Urdu. Nazer is dependent on insulin for managing diabetes and in the last few years has experienced a decline in mobility stemming from a back injury sustained a decade ago.

One day Nazer is in the living room watching television and begins to feel unwell so gets up to go to the bedroom to rest, but a feeling of light-headedness causes a loss of balance and results in a fall. Luckily Nazer is able to get back up, but still feels unwell and now has severe back pain. Nazer is scared and knows that the most immediate access to care is by calling 911. After some challenges communicating the issue to the dispatcher due to language barriers, an ambulance is dispatched as Code 4 urgent response because Nazer answered 'yes' to having shortness of breath.

The paramedics arrive on scene after receiving the call on the radio of their ambulance just after they were finishing their last call. The English-speaking paramedics are unable to have Nazer produce a health card but proceed to conduct a full assessment by communicating mostly through hand gestures and a free translation application one paramedic had downloaded on her personal phone. Through the assessment and a finger prick, paramedics found Nazer had low blood sugar and administered sugar water intravenously. Understanding Nazer was experiencing some level of back pain, they transport the patient to the nearest hospital.

The Emergency Department is very busy this day so Nazer must stay on the stretcher with the paramedics while they wait to be triaged. Nazer is feeling more uncomfortable as the minutes and even hours go by.

Finally, Nazer is seen and admitted and over the next two days in hospital, goes through a battery of tests to rule out any serious conditions. Nazer is not able to have visitors due to the COVID-19 pandemic, so feels extremely isolated.

The attending physician at the hospital sets up a series of follow-up appointments including falls prevention and pain management clinics, a physiotherapist, an endocrinologist, and a nutritionist. Nazer will need to arrange for transportation to these appointments and with worsened mobility issues due to the fall and some across town, one appointment will take up most of the day. This means Nazer will miss many of the daily visits from the Urdu-speaking neighbour who helps out and is the main source of socializing during a week.

It takes months for Nazer to complete all of the appointments set by the hospital doctor with some resulting in more appointments. With every appointment and practitioner, Nazer must repeat, in the best English possible, an explanation of how the fall happened, what treatments and tests have been undertaken, a list of medications being taken and medical history. Nazer is confused as to why appointments were not made with the practitioners who are already caring for Nazer and who have performed the same tests.

Nazer is grateful for the free health care but feels life has been turned upside down as it now consists mostly of medical matters. Nazer is tired and starts to feel depressed missing normal daily routine including the help and company of the neighbour. Overall, Nazer's health and wellbeing begin to decline.

A system of health care that is completely integrated and utilizes innovative technology would create a more seamless patient journey that is more efficient and yields better outcomes. Such a system would create a very different experience for the patient in this scenario.

After Nazer has called 911 the dispatcher retrieves the caller's electronic health record and sends it to the paramedics' smartphones. Since the paramedics are just finishing up another call, they are not near their ambulance but receive the call immediately on their cell phones.

On the way, the paramedic is able to review Nazer's electronic health record sent by dispatch that contains the patient's health card number and medical history which includes a test results, imaging, treatment plan and medications. They read that Nazer has diabetes and a back injury. The record identifies Nazer's primary care physician and that Nazer has been under the care of an endocrinologist and physiotherapist. The treatment plan shows Nazer is on a nutrition plan and does physiotherapy exercises at home.

When paramedics arrive, they use their cell phone's translator tool that uses artificial intelligence to not only translate what Nazer says into the phone but also translate the meaning and sentiment of the message. This means paramedics can quickly receive pertinent information that is accurate without any misunderstandings. They are also better able to gauge how Nazer is feeling.

They proceed to explain to Nazer, using the translation tool, the steps to the assessment, most of which are automated. Nazer is wearing a sensor patch, which the paramedic taps with their cell phone to obtain a glucose level that is automatically uploaded to Nazer's electronic health record. With the low reading the paramedics begin an intravenous to administer dextrose as per the endocrinologist's notes on the health record.

The paramedics are also able to measure Nazer's back pain level with an electronic pain assessment tool in addition to Nazer's verbal description and compare it against readings on the electronic health record from the hospital's pain management clinic. Results show that

Nazer's pain is less severe than recorded in previous readings and the medication Nazer has been prescribed will be effective in easing the pain. The paramedic confirms that Nazer has this medication in the house and it has not expired. The pain level reading and administration of medication is also uploaded to the electronic health record.

Nazer is already starting to feel better as the paramedics are discussing making a referral to the Home and Community Care Services and HPS's Mobile Integrated Health (MIH) so Nazer can receive ongoing care at home. Just then, the paramedic received a video call from Nazer's primary care physician who was alerted to their visit with the paramedics' updates to Nazer's electronic health record. The doctor was able to confirm with the paramedics the course of action taken was appropriate then set up a follow up appointment with Nazer for the next day. Nazer felt reassured by seeing and speaking to the doctor.

Within a week Nazer had a visit from a case manager at Home and Community Care Services who received Nazer's electronic health record when they were added to it by the paramedics. They helped to make Nazer's home fall-proof and arranged for a nutrition plan and physiotherapy exercises. A Community Paramedic from MIH, also added to the health record, visited Nazer at home to set up remote monitors to detect falls, pain, and glucose levels. If a predetermined threshold was reached in any of these areas, a Community Paramedic would respond immediately.

Nazer did not have to leave the house at all that week, did not have to duplicate tests that had already been taken, and did not have to repeat the story of medical issues and medications. Yet Nazer received quality medical care, quickly and conveniently with a positive outcome. Nazer felt better than ever knowing there was a whole team of health professionals collaborating to provide the best possible care. More importantly, Nazer never missed a visit with the neighbour who Nazer authorized to have access to the electronic health care records and support Nazer's health and well-being as part of the care team.

An integrated health care system where up-to-date patient information is shared in real-time among health care professionals who are connected ensures the right level of care is provided when it is required and where it is appropriate. This can reduce hospital visits when care can be provided where the patient lives or in another facility. It can prevent duplication in services and testing as practitioners would have access to services the patient has already received and results of their tests.

Having immediate access to complete, updated, and accurate information puts health care providers in the best position to make more informed decisions for delivering the optimal quality care. Consultations with key stakeholders in developing this Master Plan revealed a strong desire to advance toward more integrated systems for enhanced data sharing among health care providers. Thus, it is an objective of this Master Plan that HPS work with the province and the Greater Hamilton Health Network to leverage and invest in technology to better integrate records to achieve a one patient, one record approach. The IT strategy to be developed by HPS as described in the previous section must reflect this future vision of health care.

Virtual Care

Virtual care is a component of the health care system in Ontario that is growing. It ensures that everyone has access to health care whenever they need it and from wherever they are. Patients can connect to their health care providers by telephone or video from their devices to be assessed and treated without having to be seen in person.



Paramedics also utilize this resource to connect with physicians for support and guidance in treating patients. With the onset of the pandemic, paramedics have increasingly relied on this technology. This capability means a reduction in contacts with health providers while allowing for more timely, collaborative, and informed treatment decisions.

Often paramedics are called when a patient is unsure of the severity of their condition or when transportation to receiving health care is a barrier, even when the issue is not urgent. Paramedics can use virtual care to connect patients to health care practitioners to triage patients and treat non-urgent issues in the home, preventing unnecessary transports to the hospital. This collaborative approach with the patient, paramedic and health practitioner also enables a higher level of care.

In 2020, HPS partnered with St. Joseph's Healthcare Hamilton for Community Paramedics to have direct access to Emergency Department physicians virtually. Through this partnership, Community Paramedics can consult with a doctor while they are on scene or in the homes of their clients. This permanent program ensures that clients have prompt access to the resources they require without having to be transported to the hospital

Community Paramedics also use virtual health care with Remote Patient Monitoring (RPM) clients. In collaboration with Hamilton Health Sciences and St. Joseph's Healthcare this program was expanded in 2020 to include COVID-19 positive patients in addition to post-discharge acute patients. Community Paramedics were able to utilize virtual care to support these patients in their home virtually. By the end of July 2021, Community Paramedics had used virtual care 78 times, mostly to access hospital doctors who could discharge COVID-19 patients from the program.

Although HPS Community Paramedics have access to virtually connect with their clients' health care practitioners, this technology is underutilized. With the restrictions of the pandemic, use of this technology among practitioners has accelerated and expanded. Many health professionals, family physicians, specialists and hospitals have added remote options for patients and their care providers.

An objective of this Master Plan is to expand the use of virtual care platforms by HPS paramedics. The integration of virtual care platforms into the patient care performed by all frontline paramedics, in addition to Community Paramedics, provides easy and quick access to additional expertise and enables patients to be assessed and treated in their homes. Through awareness raising, training and education, HPS paramedics will be encouraged to increase their utilization of accessing health care practitioners remotely to support and improve the provision of health care to their patients.

5.10 Reliability Management System

OBJECTIVES

- 25 CREATE A FULL-TIME POSITION TO LEAD THE IMPLEMENTATION AND OPERATION OF THE RELIABILITY MANAGEMENT SYSTEM
- PROCURE THE ONLINE LEARNING MANAGEMENT SYSTEM TO FACILITATE THE IMPLEMENTATION OF THE RELIABILITY MANAGEMENT SYSTEM

It is critical to optimize reliability in an organization of high-risk such as land ambulance services. Paramedics perform in complex, demanding environments where decisions have to be made quickly and any errors can have devastating consequences.

In order to ensure optimal performance, HPS must continue building a system that manages risks and minimizes errors. A system of policies, procedures, audits, reporting, training, and equipment that is focused on safety provides a framework for success. Such a system has been implemented in other high-risk fields such as health care, fire services and aviation. It's a system that promotes safety through a consistent, fair culture of accountability.

Since 2013, HPS has been working on creating high reliability based on a culture of trust and fairness where staff feels safe when reporting mistakes. Acknowledging errors is essential to be able to uncover flaws in the system and behaviours so they can be improved. HPS has been examining and revising elements of its system to reflect a fair and just culture that focuses on safety. For example, in 2019, HPS assessed all policies and procedures and developed a new policy manual with fewer, more concise policies that are relevant, up-to-date and include links to related and supportive information. All HPS policies now have a clear purpose and reflect a culture that prioritizes safety and trusts its employees to make good decisions. Policies are informative with the objective of guiding and supporting paramedics' work rather than being punitive. HPS has also designed a robust quality assurance program based on enhancing safety and treating employees fairly. For example, the initial focus of any internal investigation is on the weaknesses of the system and when an employee error occurs, the employee is supported not blamed.

A just culture emphasizes fairness, seeks the input of employees as the experts of the day-to-day operations and is constantly improving to ensure that employees can function effectively and safely. Such a culture enhances the engagement of employees. As noted earlier, in 2013 HPS scored 37% in overall in a score indicating the level of engagement felt by employees. Shortly thereafter, HPS began implementing the reliability management system and in 2017, the overall employee engagement score had increased to 55%. Despite this improvement there are more opportunities to strengthen the culture and enhance employee engagement. Continuing to implement the reliability management system will be critical to achieving these improvements.

As of 2018, all HPS employees have received some level of information on the framework for creating a just and safe culture. Supervisors have received in-depth training on conducting investigations and audits using this framework. HPS management also has received in-depth training and is responsible for advancing an approach focused on a safe and just culture to ensure the system and employees are performing optimally.

Although HPS was the first land ambulance service in Ontario to adopt this framework, other services are now taking this approach and have made significant progress. For example, the Region of Peel has established a unit dedicated to advancing a culture of safety and fairness in their paramedic services. They have established a reliability team consisting of individuals from all segments of the organization to be subject matter experts and lead internal investigations. They have also acquired a learning management system to assist in training staff and management.

While HPS has been viewed as a leader among paramedic services in the province for implementing this framework and is often called on for advice and guidance by other services, recently progress has slowed due to strained resources and a focus on pandemic response. The Deputy Chief of Performance and Development and the Commander responsible for the Quality Assurance program have been carrying out the work of reliability management in addition to their core functions. As workloads increase fewer resources are available to advance this work to the next phase.

Transforming to a culture of safety, trust and fairness that can be sustained takes time, effort commitment and resources. Culture change evolves over time and cannot be achieved and sustained as a short-term project. Like other paramedic services, HPS requires dedicated resources to continue to build on the progress that has already been achieved toward creating a reliable system that prioritizes safety and fairness. As such, HPS will require at least one full-time employee dedicated to the work of implementing a reliability management system through continuous improvement and change management. This person would work closely with the Deputy Chief of Performance and Development and the Commander of Quality Assurance to regain momentum and move toward the next phase of this work. In addition, HPS needs to procure the online learning management system and accompanying materials to assist in implementing a reliability management system, including training courses for management and frontline staff.

Reliability Management System Implementation Plan

Establish Reliability Management Team (RMT)
Procure Learning Management System (LMS)
Train RMT
Establish 'Go Team' for high risk analysis
Train Subject Matter Experts (SME)

Review/update Policy Manual Ongoing/updated training Measure progress

ENGAGE 2015-2019

TRAIN 2023-24

SUSTAIN 2025

2026+

Management training
Superintendent training
Union training
Training for City Department Leaders
Orientation for staff
Revise and expand QA program
Review/revise policies

Train all staff (through SMEs, LMS)
Create processes for onboarding, policy review, training
Communications activities
Build Risk Register
Develop Mitigation plan for Risk Register
Develop Self-Reporting process

FACILITIES

OBJECTIVES

- 27 SECURE A FACILITY IN THE SHORT TERM FOR AN OPERATIONAL HUB
 THAT INCLUDES A RESPONSE STATION, LOGISTICS CAPABILITIES AND A
 WAREHOUSE SPACE FOR THE CENTRALIZATION OF MEDICAL SUPPLIES FOR
 CITY OF HAMILTON DIVISIONS PROVIDING HEALTH CARE
- 28 CONDUCT AN HPS FACILITY STUDY AND DEVELOP A STRATEGY TO ADDRESS THE MEDIUM AND LONG-TERM NEEDS OF A GROWING SERVICE
 - A) MAINTAIN A FOCUS ON GREEN BUILDINGS TO OBTAIN LEED CERTIFICATION

As noted earlier, HPS has been expanding its fleet and workforce to meet growing demands for service, demands that are expected to continue to increase as the population grows and ages. As a result, HPS has outgrown the current vehicle and personnel space. Additional space is required immediately as well as an intermediate and long-term plan that ensures there is adequate space to accommodate future growth.

The MOH's *Provincial Equipment Standards for Ontario Ambulance Services* requires that equipment and medications be safely stored in the ambulance or ERV. Ambulances must be kept behind locked doors to prevent the damage and theft of critical equipment and pharmaceuticals onboard. In addition, medications must be stored in a temperature-controlled environment to maintain their efficacy. An ambulance or ERV stored outdoors is exposed to the harsh climate which can decrease the potency of medication. Moreover, the weather can also impact the vehicle's functioning. Storing ambulances and ERVs indoors helps to protect the vehicle, its contents and ensure it is ready to respond to calls immediately.

Indeed, part of the ASR (described in Section 3.2) conducted by the MOH to ensure ambulance services meet the certification standards is the expectation that:

Ambulances, ERVs, and ESUs [Emergency Service Units] are stored in a protected environment from heat or cold to protect medications.

Failure to meet this expectation puts the service at risk of being in non-compliance and can impact the renewal of certification to operate a land ambulance service.

Additional ambulances mean additional paramedics to staff them and more people require more space. When paramedics are not on a call, they need space that is close to ambulances and ERVs so they can quickly access the vehicle when a call is received. During downtime, paramedics need space to complete reports, undertake on-line training, eat, or decompress. As the number of paramedics needed to staff additional ambulances increases, space to accommodate them becomes scarce.

Current State

HPS currently operates out of 18 stations throughout urban and rural areas of Hamilton. HPS shares 16 stations with the Hamilton Fire Department (HFD) who owns these facilities and leases space to HPS. The remaining two stations are owned and occupied by HPS exclusively.

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Hamilton Paramedic Service - Stand Alone Facility



Hamilton Paramedic Service/Hamilton Fire Department - Shared Facility

Sharing stations leads to more efficient use of resources, environmental benefits and reduced operating costs. The recent growth in HPS fleet in recent years has resulted in a lack of space to adequately house all ambulances and ERVs at the shared stations. Furthermore, the HPS stand alone stations, Stations 30 and 32, are both over capacity. Station 30 was built to properly store 17 vehicles. However, with the expansion of the fleet, there are currently 38 vehicles at Station 30, 35 of which need to be stored inside as the remaining three are administration vehicles and can be parked outside. Currently, 29 vehicles are parked inside. In order to accommodate them, vehicles are parked closely together and in areas of the floor designated for logistics activities. In addition, a temporary climate-controlled garage has been installed on the grounds to house a vehicle. The remaining six vehicles are spare ambulances which are maintained for operational continuity and contingency readiness in the event of a disruptive or disastrous event. These vehicles should also be inside, however with lack of space, they are parked outside, and personnel have to empty their contents to be stored inside the station. This impacts how quickly these vehicles can be accessed and equipped in the event a contingency response is required.

Station 30 Vehicle Placement						
Total Vehicles	Spaces Inside	Vehicles Outside that should be Inside	Admin Vehicles Outside			
38	17	29	6	3		

Station 30 also serves as the logistics hub and includes an inventory warehouse. Here, vehicles are stocked and cleaned, equipment maintenance is performed, and equipment is distributed. This takes place among three buildings on the property due to lack of one large facility. Additionally, there is warehouse space for medical supplies and equipment, PPE, uniform inventory, tools, and parts. The warehouse is also utilized by the HFD to store uniforms, bunker gear, fire suppression consumable products and equipment.

With the number of vehicles, personnel and activities occurring at Station 30 there is limited space for paramedics to work or take breaks between calls. As a result, they have had to utilize the garage and functional areas to eat and rest. The lack of space has been particularly problematic with the COVID-19 restrictions requiring people maintain physical distancing inside buildings.

Logistics technicians also experience challenges with the lack of space as they require large open areas to conduct cleaning and disinfecting of vehicles and equipment and when performing maintenance on equipment. They also must move among three buildings to retrieve the materials they need to complete their tasks, resulting in inefficient workflow. Furthermore, logistics personnel are disrupted by the activity in the station unrelated to their tasks which further increases the time it takes to get vehicles operational-ready.

Due to the amount of activity at Station 30 requiring a high demand for electricity, compounded by an aging electrical infrastructure, Station 30 frequently experiences brownouts. When this occurs, there is a drop in voltage causing irregular and insufficient power supply. This not only affects productivity but fluctuations in power can damage electronic devices that are created to operate at specific voltages.

As recommended in Section 5.7, HPS will look to assume responsibility for procurement and management of the medical supplies for the City of Hamilton's long-term care homes and Hamilton Public Health Services. Since the space at Station 30 poses challenges for current HPS logistics activities, it would be inadequate for the additional inventory associated with a centralized model of medical supplies for the City of Hamilton. It is therefore recommended that HPS secure a facility to serve as an operational hub which would include a response station and accommodate logistics activities. This facility would provide enough space for logistic technicians to perform their duties without encroaching on paramedic activities. It would also contain a warehouse that can house HPS inventory along with the medical supplies for City of Hamilton divisions that are currently housed in a temporary depot which is scheduled to close in 2022.



Station 32, a facility exclusively used by HPS, is also operating beyond capacity. Station 32 is able to properly accommodate five vehicles, yet nine vehicles are currently assigned to this station. The overflow vehicles are for MIH activities and are parked outside so personnel must remove the contents of the vehicles to store indoors when the vehicle is not actively staffed. When the vehicle is actively staffed and stocked and left outside during inclement (hot or cold) weather it must idle to control interior temperatures which negatively impacts the environment through the emission of greenhouse gas.

An analysis of the space in stations shared with the HFD indicates these facilities are at full capacity with no available space for additional HPS vehicles. In some stations, HPS vehicles have double parked to ensure vehicles are indoors.

	HFD/HPS Shared Station Capacity							
Station	Number of Bays	HFD Vehicles	HPS Vehicles	Available Space	Use of Available Space			
Station 1 John St. N., Hamilton	8	6	2	0				
Station 3 Garth St., Hamilton	2	1	1	0				
Station 4 Upper Sherman Ave., Hamilton	5	4	1	0				
Station 7 Quigley Rd., Hamilton	3	1	1	1	Space required for HFD vehicles to drive through			
Station 9 Kenilworth Ave. N., Hamilton	5	2	1	2	Space required for HFD vehicles to drive through			
Station 10 Main W. and Norfolk, Hamilton	3	1	1	1	Space required for HFD vehicles to drive through			
Station 12 Hwy 8, Stoney Creek	4	3	1	0				
Station 15 Arvin Ave., Stoney Creek	5	2	3	0				

	HFD/HPS Shared Station Capacity							
Station	Number of Bays	HFD Vehicles	HPS Vehicles	Available Space	Use of Available Space			
Station 17 Isaac Brock Dr., Stoney Creek	4	3	1	0				
Station 18 Hwy 56, Binbrook	6	4	1	1	Space required for HFD equipment			
Station 19 Homestead Dr., Mount Hope	5	4	1	0				
Station 20 Garner Rd, Ancaster	4	1	2	1	Space required for HFD vehicles to drive through			
Station 21 Wilson St., Ancaster	8	4	1	3	Space required for HFD vehicles to drive through			
Station 23 Memorial Square, Dundas	6	4	1	1	Space required for HFD equipment			
Station 24 Parkside Dr., Waterdown	6	4	2	0				
Station 25 Old Brock Rd., Greensville	5	4	1	0				

While there appears to be some spaces available for vehicles in shared stations 7, 9, 10, 20 and 21, these are drive-through stations that require surface area dedicated to the movement of large fire apparatus. Fire trucks must be able to pull in and drive out freely without having to back up due to obstruction from another vehicle. This enables the apparatus to exit the station quickly and easily when responding to an emergency. Stations 18 and 23 each have space for one vehicle, however, this is required for fire equipment that is stored on the facility floor.

A review of the vehicle space in exclusive HFD stations shows a similar situation, with no capacity for HPS vehicles.

HFD-Only Station Capacity						
Station	Number of Bays	HFD Vehicles	Available Space	Use of Available Space		
Station 2 Upper Wellington, Hamilton	3	3	0			
Station 5 Stone Church Rd. E., Hamilton	4	3	1	Space required for HFD vehicles to drive through		
Station 6 Wentworth St. N., Hamilton	4	4	0			
Station 8 Melvin Ave., Hamilton	2	2	0			
Station 11 Ray St., Hamilton	2	1	0	Station converted to single apparatus floor design		
Station 13 (Mechanical Facility) Bay St. N., Hamilton	0	0	0			
Station 14 Chapel Hill Rd., Elfrida	3	3	0			
Station 16 Barton St. E., Stoney Creek	4	4	0			
Station 26 Lynden Rd., Lynden	4	4	0			
Station 27 Old Hwy 8, Rockton	4	3	1	Rural location		
Station 28 Brock Rd., Freelton	3	3	0			

Almost all HFD stations are at full capacity. The space at Station 5 is required for fire apparatus to drive through and changes at Station 11 allow for just one vehicle. The only space available is at Station 27 in Rockton which is too far from the city where the majority of HPS calls occur and would increase response times.

Given that no adequate space exists at either HPS/HFD shared stations or HFD exclusive stations, it is the objective of this Master Plan that a comprehensive study of HPS facilities be conducted and a strategy be developed to address the medium and long-term facility needs.

However, there is an immediate need for space to house the six spare ambulances that are currently outside at HPS Station 30 due to overcrowding of vehicles inside. Additional space is required to accommodate vehicle enhancements expected over the next few years while the facility strategy is being developed and implemented with longer term solutions. Thus, HPS will need to secure a facility that can house ten vehicles, six to alleviate the congestion at Station 30 and four new vehicles expected by 2024.

Since the size of an ambulance and ERV with space to open doors and remove equipment is approximately 450 square feet, a floor space of approximately 4,500 square feet is required for vehicles. An additional 2,000 square feet of space is needed for personnel including offices, a lunchroom, lockers, and washrooms.

This Master Plan recommends that this facility also accommodates logistic activities. As described above, it would also contain warehouse space for HPS inventory and the medical supplies for City of Hamilton divisions providing health care. A facility of 5,000 to 7,500 square feet is required for logistics and warehouse capabilities.

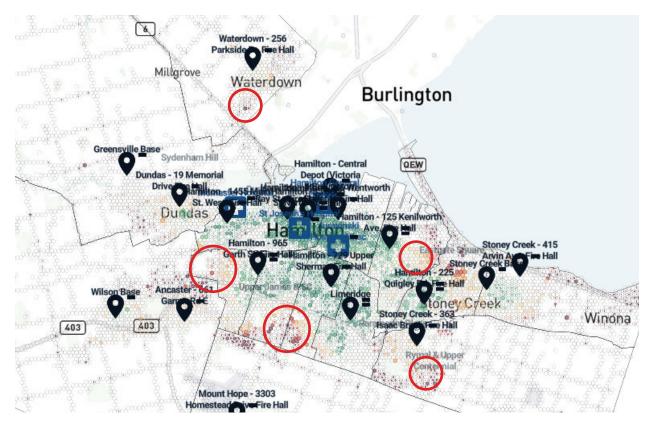
In total, an operational hub will require a facility that is a minimum of 11,500 square feet and maximum of 20,000 square feet of space. This will accommodate the present need for a response station to meet growing demands and house existing vehicles for which there is no space, plus additional vehicles that will be added to the fleet in the short term. This facility will also be large enough for HPS logistics activities and include space for a warehouse for HPS inventory and medical supplies for City of Hamilton divisions such as long-term care homes and Hamilton Public Health Services.

While the immediate need for space will be addressed by the objective to secure a facility for an operational hub, it will not be sufficient to accommodate an expanding service required to meet growing demands. Since 2014, ten ambulances have been added to the fleet to manage increasing service demands. Additionally, as discussed in Section 4.0, existing demand requires an additional 2.5 ambulances to handle five 12-hour shifts during peak periods. Furthermore, demand is predicted to continue throughout the course of this Master Plan by 3.3% per year which would require an enhancement of approximately one ambulance per year for ten years. Thus, more space will be required by year three of this Master Plan and beyond to accommodate the growing fleet and an increase in paramedics to staff each ambulance.

Therefore, this Master Plan recommends a facility study be conducted to develop a strategy to address the medium and long-term needs of a growing service. HPS will work with the City of Hamilton's Corporate Real Estate and Facilities Divisions to contract a third party to conduct a facility study that will assess the adequacy of HPS facilities against the operational needs of the service in the medium and long term.

The study will recommend a model that will identify station types and locations for optimal functioning and response time performance. For example, a model of a central reporting station with one-bay stations and/or traditional stations in strategic locations will be considered. A central reporting station and headquarter facility would be capable of housing many vehicles and include space for administration personnel. One-bay stations are considerably smaller than a traditional paramedic station and do not require parking spaces as they are a 'rest-and-ready' facility where paramedics can stop for a break during their shift. Traditional stations may still be required to serve rural areas of the city rather than vehicles being deployed from a central station located in the urban area, thereby increasing response time to rural areas.

This is the model utilized in Ottawa, where a central reporting station is in the busiest area of the city with restand-ready facilities throughout the city and four traditional stations in the outskirts of the city. Peel Regional Paramedic Services utilized a different model consisting of four hubs, similar to central reporting stations, to cover the quadrants of the city, with rest-and-ready facilities throughout the city and just one traditional station in the outer city limits. Placement of stations will take into consideration areas of the city with high demand for service. According to a review of 2019 performance using the Darkhorse Analytics tool, areas of the city that would currently benefit by the addition of a paramedic station are as follows:



Placement of future stations to improve performance will be identified using the Darkhorse Analytics predictive software as part of the facility study.

As well, the facility study will examine the City of Hamilton's land use structure for planned urban and rural development as per the Growth Related Integrated Development Strategy (GRIDS2) in identifying station placement.

Ideal placement of facilities for functional operations such as cleaning and maintenance of vehicles and equipment will also be considered. The potential to co-locate in existing City of Hamilton facilities will be examined, either by sharing a facility or utilizing the same premises where space allows. Interagency co-location with health care or first responder partners will be also be studied.

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The facility study will also assess the operational hub acquired in the short term for response, logistics and warehousing purposes as per the previous objective and provide a plan for fulfilling the medium to long-term needs for these functions.

HPS requires a comprehensive review of its facilities to ensure the operational structure and deployment of resources are optimal for the best outcome of a growing community with increasingly diverse needs. HPS is committed to ensuring that any renovations undertaken or newly constructed buildings that may be acquired as a result of the facility study will be green buildings that are healthy, efficient and produces cost-savings. HPS will seek to earn LEED (Leadership in Energy and Environmental Design) certification for its future facilities.



PEOPLE PLANNIING

OBJECTIVES

DEVELOP A 'PEOPLE PLAN' TO ENSURE HPS'S WORKFORCE CAN PERFORM OPTIMALLY IN A POSITIVE ENVIRONMENT NOW AND IN THE FUTURE, THAT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING COMPONENTS:

ATTRACTION AND RECRUITMENT

- A) WITH STAKEHOLDERS, DEVELOP A RECRUITMENT PROGRAM IN WHICH SELECT STUDENTS ARE SUPPORTED IN OBTAINING A COLLEGE DIPLOMA IN THE PARAMEDIC FIELD WITH THE GUARANTEE OF EMPLOYMENT WITH HPS UPON COMPLETION
- B) BUILD RELATIONSHIPS WITH DIVERSE COMMUNITIES TO DEVELOP A PROGRAM THAT EXPANDS HPS RECRUITMENT ACTIVITIES AND PROMOTES CULTURAL COMPETENCY TO BETTER SERVE DIVERSE POPULATIONS. CONSIDER ESTABLISHING A CULTURAL LIAISON POSITION

RETENTION

- C) DEVELOP A RETENTION PLAN WITH STAKEHOLDERS TO IDENTIFY CHALLENGES AND SOLUTIONS TO RETAINING PARAMEDIC PERSONNEL
- D) REVIEW AND ENHANCE EMPLOYEE HEALTH AND WELLNESS ACTIVITIES THROUGH FURTHER DEVELOPMENT OF MENTAL HEALTH SUPPORTS, PEER SUPPORT TEAM ACTIVITIES AND REDUCING REPETITIVE STRAIN INJURY
- E) ONGOING REVIEW AND ACTIONING OF EXISTING AND FUTURE CITY OF HAMILTON'S OUR PEOPLE SURVEY RESULTS TO STRENGTHEN WORKPLACE CULTURE
- F) UTILIZING THE CITY OF HAMILTON'S EQUITY, DIVERSITY AND INCLUSION (EDI) FRAMEWORK AND ROADMAP AS A GUIDE, DEVELOP AND IMPLEMENT INITIATIVES TO STRENGTHEN EDI WITHIN HPS AND IN SERVING THE COMMUNITY

SUCCESSION

- G) DEVELOP A SUCCESSION PLAN WITH PROJECTIONS FOR RETIREMENTS
- H) CREATE A MANAGERIAL DEVELOPMENTAL POSITION TO OFFER THE OPPORTUNITY FOR EMPLOYEES TO DEVELOP CAREERS AND BE PREPARED TO POTENTIALLY SUCCEED MANAGERS



HPS values its people. The functioning and effectiveness of operations is because of the people. Without skilled, motivated, and engaged employees in all areas of the service, from paramedics to logistics technicians, schedulers, administrative staff, and data analysts, HPS would not be able to adequately serve the community. To ensure HPS continues to provide quality service and meet future service requirement and evolving community needs, a talented, dedicated workforce must be maintained. Achieving this requires focusing on attracting the right people and retaining them, providing a positive workplace culture, training and developing employees, supporting their health and well-being and when the time comes, ensuring they are succeeded by people who are prepared to step into the role.

To ensure HPS has a workforce that can successfully deliver the best possible care in the most efficient way, now and in the future, systematic planning for optimal people performance is required. Working with the City of Hamilton's Human Resources Division partners and guided by the City's Our People and Performance Plan, HPS will develop a People Plan that will include but not be limited to the components outlined below.

Attraction and Recruitment

Attracting the right people is an important part of developing a strong workforce. Paramedic services across the province compete for the same candidate pool which poses challenges in the recruitment of paramedics at HPS. The recruitment process is a lengthy one with multiple phases of interviewing, testing and orientation that consumes time and resources. Moreover, due to the high demand for paramedics across the region, a paramedic may be recruited by more than one service. This can lead to candidates leaving one service for another at anytime during the recruitment process or even once it is completed. As a result, the process must begin again to ensure HPS has recruited a sufficient number of paramedics to match service demands.

As part of its People Plan, HPS will carry out activities to attract, recruit and secure a workforce with the qualities and abilities to meet the service's needs now and into the future. To achieve this, HPS will explore developing a college paramedic recruitment program with stakeholders that would guarantee employment with HPS upon successful completion. Students for the program would be selected through an application process and receive tuition funding and support for the one-year program. Such a program enables HPS to select student applicants with the qualities required for an evolving service and ensure candidates reflect the diverse community they will be serving as paramedics. It also is an opportunity for HPS to support Hamilton residents with the desire to pursue a career as a paramedic but without the financial means. A college recruitment program would also help increase stability of candidates who would be committed to HPS employment as they enter the program. This program would see Hamilton investing in Hamiltonians who would then serve the Hamilton community.

HPS will also develop a framework to guide building and enhancing relationships with diverse communities to support the attraction and recruitment of paramedics, as well as promote culture competency within the HPS workforce. HPS will work with City of Hamilton bodies such as the Hamilton Immigration Partnership Council, the Urban Indigenous Strategy, and the LGBTQ Advisory Committee to facilitate connecting with diverse groups to learn how best to attract candidates for employment. Through such connections, HPS will also work to incorporate a cultural competency component into the orientation process by creating opportunities to interact with leaders and members of diverse communities. HPS will explore the possibility of creating a 'cultural liaison' role to facilitate building relationships and establishing programs with diverse groups to advance equity, diversity, inclusion, and cultural competency within the service.

Retention

An HPS People Plan will also include strategies aimed at retaining employees. Employee turnover impacts hiring and training costs, operational continuity, and workplace culture. Effective recruitment activities and a positive candidate experience are first steps in supporting employee retention. In addition to the recruitment activities described above, HPS will create a retention plan to reduce employee turnover, prevent attrition and increase retention. Working with the City of Hamilton's Human Resources Division, key stakeholders, union representatives and professional bodies such the Ontario Association of Paramedic Chiefs (OAPC), HPS will identify the challenges in retaining paramedic personnel and develop a plan of actionable solutions.

Mental Health

A key to retaining employees is ensuring they are healthy and well. In 2018, HPS established the Peer Support Team to build on the Road to Mental Health Readiness training delivered to employees. The Peer Support Team is made up of paramedic volunteers with the support and direction from a psychologist. Volunteers are trained to recognize and respond to their peers who may be experiencing mental health challenges. The Team provides assistance 24 hours a day, seven days a week in a variety of ways from simply checking in, to making referrals to appropriate health care services or health practitioner. This Team also promotes mental wellness through activities such as therapy dogs, acts of kindness among employees, awareness raising campaigns and distributing resources such as resiliency checklists. In 2020, the Peer Support Team was activated for peer assistance 221 times, up 75% from 2019 which saw 126 activations.



Physical Health

Promoting and protecting good physical health is also important to retaining employees. Paramedics have physically demanding and potentially dangerous jobs that can result in a range of injuries and illnesses. Paramedics are at greatest risk of strain or sprain injuries from overexertion or body motion. For a decade the most common injury sustained by HPS paramedics has been musculoskeletal injury due to repetitive strain. Furthermore, musculoskeletal injuries outnumber all other workplace injuries combined. As technology has advanced, equipment becomes easier for paramedics to handle. For example, paramedics once had to manually lift and load stretchers into the ambulance which resulted in musculoskeletal injuries. In 2016, with the support of Hamilton City Council, HPS was one of the first services in the province to replace all manual stretchers with powered stretchers. These stretchers have a hydraulic lift and load system thereby reducing the need for physical exertion. HPS continually seeks out and tests equipment to prevent workplace injuries. In a 2019 pilot study, HPS paramedics identified a state-of-the-art chair with which to lift patients downstairs or through narrow spaces. HPS is currently in the process of replacing the old stair chairs in all ambulances with the lighter weight, easier to handle chairs selected by paramedics.

As part of a People Plan, HPS will review and enhance employee health and wellness activities. This will include further development of mental health supports and enhanced Peer Support Team efforts. Furthermore, HPS will aim to keep employees physically healthy by identifying additional education, training, and new innovative equipment to reduce repetitive strain injuries in the workplace.



Workplace Culture

A positive work environment leads to engaged and satisfied employees and contributes to employee retention. Employees spend more than one-third of their lives in the workplace. Paramedics spend long hours with their peers often in high pressure, emergency situations. Having a workplace culture that is supportive, collaborative, respectful, inclusive as well as one that values and empowers employees is essential to the success of HPS operations and is reflected in the service delivered to the community

To ensure HPS continues to strengthen workplace culture, HPS will proceed with advancing toward a just culture through implementing a reliability management system as described in Section 5.9. A just culture is an environment in which fairness is emphasized, employees are supported not blamed when mistakes are made, and employee input is sought to determine ways to improve job effectiveness and safety.

HPS will also address opportunities to improve workplace culture through continuing to action the results of the City of Hamilton's employee survey. The Our People Survey measures employee engagement and gives employees an opportunity to express what matters most to them in the workplace and what areas need to be improved or maintained. As outlined in Section 3.2, HPS has been implementing an action plan based on the survey results from 2018. The action plan focuses on four areas for improvement:

Career Advancement

Workload/Staffing

Recognition

Morale

Actions for each of these areas include:

	HPS Our People Survey Action Plan										
Career Advancement	Workload/Staffing	Recognition	Morale								
Increase communication of job postings within HPS from all City of Hamilton departments	Increase number of ambulance vehicles and staffing by one vehicle each year	Develop a framework to formalize a robust employee recognition program	Increase time Supervisors spend with teams in the field and at stations								
Increase awareness of opportunities for funding for conferences and tuition	Modify the Deployment Plan to decrease responses to event ratio	Ensure timely, formal recognition from the Chief and delivered by Supervisors to paramedics when patients and families commend their performance	Increase opportunities for staff to socialize and support each other								
Establish committees for employee participation to contribute to decision-making processes	Increase Supervisor awareness of available tools to assist with managing workload	Increase a positive public profile of paramedics in media	Enhance two-way communication between staff and management								
Create a development position to expose staff to managerial duties in all sections of HPS	Increase ability of Supervisors to coach and support their teams	Bolster recognition of all paramedics during Paramedic Week	Increase ability of crews to break for meals and after difficult calls								

The City of Hamilton is repeating the Our People Survey in September 2021 with results expected in early 2022. A component of the HPS People Plan will be to continue to review, action and share the progress of the survey results with HPS personnel. This includes an updated action plan based on the results of the 2021 survey. HPS is committed to continually seeking input from employees about opportunities to strengthen the workplace culture through pulse surveys, suggestion boxes, emails, one-on-one discussions, and group discussions during Professional Development Days sessions.

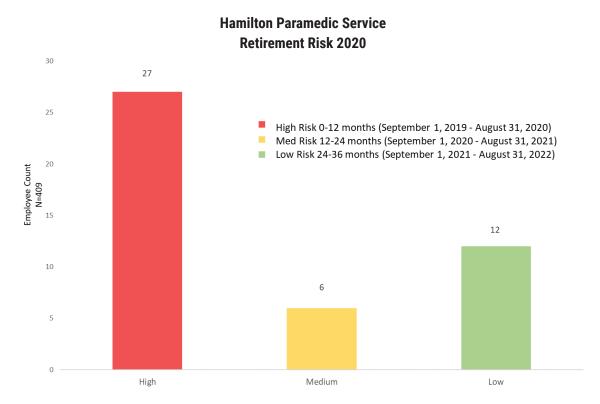
A culture in which people are treated equitably, where they feel included and one that celebrates diversity also contributes to a positive workplace environment. The Talent and Diversity Division of the City of Hamilton has recently embarked on the development of an equity, diversity, and inclusion (EDI) framework and implementation roadmap. This work will help to create, foster, and sustain a workplace culture where every employee feels included, supported, empowered, and has equal opportunity for growth and development. The EDI framework also extends to the community to ensure their values and interests are represented and their diverse needs are served in an equitable and inclusive manner.

Using the City's EDI framework and roadmap as a guide, HPS will develop and implement initiatives to strengthen EDI within the service and in serving the community. Initiatives such as targeted attraction and recruitment activities, increasing cultural competency through connections with diverse communities, training and education programs and creating opportunities for development and career advancement will be a part of the HPS People Plan to enhance workplace culture.

Succession

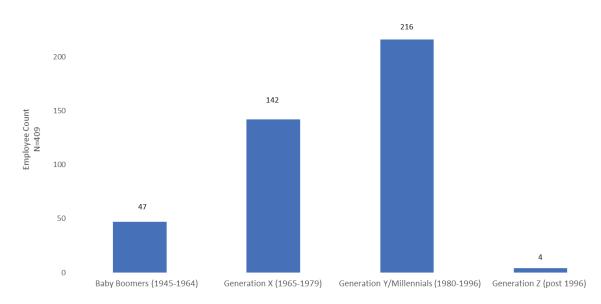
An HPS People Plan must also include a process to replace employees as they leave the service to avoid gaps in the workforce and ensure the seamless movement of talent. Succession planning identifies the positions that may need to be filled; the knowledge, skills and abilities required for these positions; and the people prepared to step into the positions. This may involve plans to develop employees' talent to match positions to be filled.

In 2020, a retirement risk analysis of the HPS workforce showed over 11% of employees are eligible to retire within the next two years. Almost 9% of the workforce is eligible to retire presently.



By the end of this 10-year Master Plan, almost half (46%) of the 2020 workforce will be 51 years and older with many eligible to retire.

Hamilton Paramedic Service Generational Breakdown 2020



In collaboration with the City of Hamilton's Human Resources Division, HPS will develop a succession plan with updated projections for retirement so positions can be filled by the right people in a timely manner. This is includes being prepared to fill leadership roles.

Developing new leaders is a key element to succession planning. HPS will work with Human Resources to establish a managerial developmental position. This full-time position would provide experience in each of the HPS sections over the course of one year. Once the year is completed another employee would be appointed to the position. This opportunity would develop employees for further career advancement in the service and build a pool of employees prepared to move into leadership roles. It will help to retain specialized knowledge and competencies that are passed on to potential future leaders. Such an opportunity also increases employee engagement and retention. This position will enable HPS to take a proactive leadership approach to seek out potential leaders, expose them to a wide range of experiences and develop their potential.

Having a plan to replace employees who retire, move on to new opportunities, or pass away with people prepared to promptly take on the role ensures HPS continues to operate smoothly, particularly in instances of sudden vacancies of key positions.

The HPS People Plan will also need to include plans for hiring staff. Throughout this Master Plan, objectives have identified for creating positions and making enhancements to existing positions. Adding ten paramedics per year, increasing the number of supervisors, logistics personnel, community paramedics and professional development staff for training as well as establishing positions for leads of the Cardiac Safe City program, Reliability Management System and possibly a Cultural Liaison requires a thorough plan with timelines and financial impacts.

Developing a People Plan that addresses these hiring needs and includes enhancing attraction, recruitment, retention, and succession activities and considers the current and future needs of HPS will ensure optimal performance of the workforce to best serve the community.



OBJECTIVES AND ACTIONS

The HPS Master Plan 2022–2031 has presented a series of objectives based on five priorities aimed at transforming the service through technology advancements, innovation, resource allocation and operational optimization.

The objective outcomes related to each priority are as follows:

Operational Integration	Infrastructure Progression	Service Delivery Optimization	Positive Work Culture Elevation	Healthy & Safe Communities Protection and Promotion
Modernized Dispatch	Adequate Response Resources	Enhanced Deployment	Just and Safe Culture	Expanded, Centralized and Sustained MIH
Centralized Logistics Integrated Patient Records	Enhanced Logistics Sufficient Facilities Advanced IT	Reduced Offload Delays Increased Cultural Compentency Increased Virtual Care	People-Focused Culture	Broadened Scope of Practice Specialized Services Contingency Response Preparedness Reduced Carbon Footprint



The Master Plan is summarized in the following chart organized by priorities with associated objective categories and actions that reference the objective number found within this Master Plan. Estimated timelines for implementing each action is included. Some objectives will require further investigation while others require the development of detailed implementation plans. Therefore, much of the first year of this Master Plan will entail planning before implementation can take place. The Master Plan will be updated to reflect the implementation plans once they have been developed.

This ten-year Master Plan is a dynamic document. It should be considered a 'baseline' to be regularly reviewed and updated on a yearly basis. As the needs of the community change, new developments arise and trends change, a continual update ensures the Master Plan remains relevant and cutting edge. Also, once actions have been completed and further actions identified, they will be added to the Master Plan. The Master Plan will undergo a complete refresh at the five-year mark which would then provide an ongoing 10-year forecast for required activities as adjusted by the experiences of the first five years.

H	AMILTON PARAMEDIC SERVICE MASTER PLAN 2022-2031	
PRIORITY: Operation	nal Integration	
Objective Category	Objective Number and Action	Timeline
Modernized Dispatch	3. Pursue operational responsibility of Hamilton's land ambulance dispatch with core dispatch funding remaining a provincial responsibility	2022-2025
Centralized Logistics for City of Hamilton Divisions	19. Investigate assuming responsibility for procuring and managing medical supplies for City of Hamilton's long-term care homes and Public Health Services	2022
	Acquire warehouse space to accommodate the centralization of medical supplies for City of Hamilton divisions providing health care	2022
	b. Explore the possibility of providing respirator testing for City of Hamilton divisions where employees require respirator masks	2022
Integrated Patient Records	23. Work with the Greater Hamilton Health Network to leverage and invest in technology to better integrate records to achieve a one patient, one record approach to patient care	2022-2027

PRIORITY: Infrastru	re Progression		
Objective Category	bjective Number and Action		Timeline
Adequate Response Resources	 An addition of five 12-hour shifts at peak d approximately 21,500 additional hours of s required to meet existing service demand 		2024-2026
	 An addition of one ambulance with ten para next ten years is anticipated to address the demand 		2022-2031
Enhanced Logistics	3. Complete a thorough review of the Logistic ensure resources and capabilities meet cha of the service including preparedness for d City of Hamilton health care divisions	anging and growing demands	2022-2023
	 Add logistics personnel to manage ar enhancements to frontline services 	n increased workload due to	2024, 2026
	Implement a comprehensive asset manage manage inventory over the long term for H divisions where applicable		2022
Sufficient Facilities	7. Secure a facility in the short term for an op a response station, logistics capabilities ar the centralization of medical supplies for the providing health care	nd a warehouse space for	2022-2023
	3. Conduct a facility study and develop a stra and long term needs of a growing service	tegy to address the medium	2024
	a. Maintain a focus on green buildings t	o obtain LEED certification	Post 2024

PRIORITY: Infrastructure Progression										
Objective Category	Objective Number and Action	Timeline								
Advanced IT and Data Management Systems	22. Develop an IT strategy based on a comprehensive review of IT and data management systems (both hardware and software) to improve operational efficiency	2022								
	a. Acquire smartphones for all paramedics with technology to integrate with dispatch systems, access to electronic patient care records (ePCRs) and workplace safety application	2022								
		2022 - Ongoing								

PRIORITY: Service	Delivery Optimization	
Objective Category	Objective Number and Action	Timeline
Enhanced Deployment	4. Increase the number of Advance Care Paramedics (ACPs) to a level that enables 90% of calls requiring ACP intervention to have an ACP response	2022
	5. Redeploy Emergency Response Vehicles (ERVs) to improve response time performance	2023
	6. Update the Tiered Response Agreement (TRA) to reduce unnecessary use of Hamilton Fire Department resources on medical calls taking into consideration the impact of the modified TRA during the pandemic	2022
Reduced Offload Delays	7. Continue to implement and improve initiatives to reduce offload delay in collaboration with health care system partners	2022- Ongoing
Increased Cultural Competency	29 b. Build relationships with diverse communities to develop a program that expands HPS recruitment activities and promotes cultural competency to better serve diverse populations. Consider establishing a Cultural Liaison position	2022-2024
	29 f. Utilizing the City of Hamilton's equity, diversity, and inclusion (EDI) framework and roadmap as a guide, develop and implement initiatives to strengthen EDI within HPS and in serving the community	2022
Increased Use of Virtual Health Care Platforms	24. Improve integration and utilization of virtual care platforms in paramedic patient care	2022- Ongoing

Objective Category	Objec	ctive Number and Action	Timeline
Just and Safe Culture	25.	Create a full-time position to lead the implementation and operation of the reliability management system	2024
	26.	Procure the online learning management system to facilitate the implementation of the reliability management system	2024
People-Focused Workplace Culture	29 .	Develop a 'People Plan' to ensure HPS's workforce can perform optimally in a positive environment now and in the future that includes but is not limited to the following components:	2022-2023
		 With stakeholders, develop a recruitment program in which select students are supported in obtaining a college diploma in the paramedic field with the guarantee of employment with HPS upon completion 	2024
		 Build relationships with diverse communities to develop a program that expands HPS recruitment activities and promotes cultural competency to better serve diverse populations. Consider establishing a Cultural Liaison position 	2022-2024
		c. Develop a retention plan with stakeholders to identify challenges and solutions to retaining paramedic personnel	2022
		d. Review and enhance employee health and wellness activities through further development of mental health supports, Peer Support Team activities and reducing repetitive strain injury	2022
		e. Ongoing review and actioning of existing and future City of Hamilton's Our People Survey results to strengthen workplace culture	2022-2025
		f. Utilizing the City of Hamilton's equity, diversity, and inclusion (EDI) framework and roadmap as a guide, develop and implement initiatives to strengthen EDI within HPS and in serving the community	2022
		g. Develop a succession plan with projections for retirements	2022
		h. Create a managerial developmental position to offer the opportunity for employees to develop careers and be prepared to potentially succeed managers	2025

Objective Category	Objec	ctive Number and Action	Timeline
Expanded, Centralized and Sustained Mobile	8.	Increase the capacity of Mobile Integrated Health (MIH) to address growing demands for community and at-home support:	2022
Integrated Health (MIH)		a. Create a full-time position to lead the Cardiac Safe City program	2025
(IVIII I)		b. Ensure integration, involvement, and engagement of frontline paramedics in MIH activities	2022- Ongoing
		c. Advocate for additional community paramedic positions through Ministry of Health and the Greater Hamilton Health Network	2022
	9.	Advocate for sustained funding of MIH to become a permanent component of primary care in Ontario in accordance with the Community Paramedicine Policy Framework developed jointly by Association of Municipalities Ontario (AMO) and the Ontario Association of Paramedic Chiefs (OAPC)	2022- Ongoing
	10.	Develop a plan in collaboration with stakeholders to establish a central clinical hub to access MIH and other services, starting with installing a clinician in dispatch	2022-2030
Broadened Scope of Clinical Practice	11.	Pursue Primary Care Paramedic (PCP) ability to perform select Schedule 2 procedures from Reg 257/00 of the <i>Ambulance Act</i> :	
		a. Support PCPs in becoming certified in Primary Care Paramedic Autonomous Intravenous (PCP AIV)	2022-2023
		b. Support PCPs in becoming certified to access and administer a wider range of medication	2023
	12.	Implement a requirement that all PCP recruits be PCP AIV certified as a condition of employment with HPS	2023
	13.	Train all paramedics to International Trauma Life Support (ITLS)	2024
Addition of Specialized Services	14.	Acquire an emergency response utility vehicle through the reallocation of vehicle capital to service events where the congregation of people inhibits access by an ambulance	2022
	15.	Develop a framework for the delivery of specialized services to inform operational and capital decision	2022
	16.	Engage hospital partners to jointly advocate for the Ministry of Health to authorize and fund a Critical Care Transport Unit in partnership with Ornge	2023
Contingency Response Preparedness	17.	Participate in disruptive and disastrous event preparedness exercises with community and emergency response partners including annual Emergency Operations Centre (EOC) exercises based on the hazardous incidents identified in the Hazard Identification and Risk Assessment (HIRA) Report	2022- Ongoing
Reduced Carbon Footprint	21.	Develop a 'clean and green' plan to reduce the carbon footprint of HPS including examining the feasibility of acquiring hybrid or electric vehicles and implementing wireless charging stations	2022



FINANCIAL PROJECTION

In the following pages are the preliminary costs that have been estimated based on the objectives identified in this Master Plan that have known or anticipated financial impacts.⁹⁵

It is presented in three scenarios. Each addresses the annual growth in service over ten years. In two senarios, the current demand for service is also addressed. That is, five 12-hour shifts at peak hours (which translates to an additional three ambulances and 25 staff) as per Objective 1.

Model A addresses the ongong growth demand in service with the addition of one ambulance with ten staff each year for the duration of this Plan. This model addresses the current demand for service with the addition of five 12-hour shifts at peak hours implemented in 2023.

Model B also addesses the annual growth demand with the addition of one ambulance and related staff resources each year for ten years. However, Model B addresses the current demand for service by phasing in the additional resrouces for peak hours over three years beginning in 2023.

As with the first two scenarios, Model C addresses the growing demand for service with an additional ambulance and ten staff annually for the duration of the Master Plan. However, Model C does not address the current needs. This will require optimizing existing resources to manage the current demands.

Each Model also includes the requirement for a spare vehicle in 2026 and another in 2031 with accompanying staff.

HPS will work with City of Hamilton council within the appropriate processes to assure the most effective approach is taken to finance objectives that require funding.

⁹⁵ Although the Hamilton Paramedic Master Plan (2022-2031) was completed in 2021, it was deferred to be presented to City of Hamilton Council for endorsement in April 2022 subsequent to the 2022 budget cycle. Thus, to align with the 2023 budget cycle the Financial Projection Models commence in 2023 and extend for a ten-year term.

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Control Cont			347.500	354.300	722.800	368,600	375.900	383.300	390.800	796.800	406.100	5,509
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Logistic Technicians			1,288,270	1,308,680	1,329,400	1,350,460	1,371,840	1,393,570	1,415,660	1,438,100	1,460,910	13,625
Cardiac Safe City Lead	-		-	-	-	-	-	-	-	-	-	3,170
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raining Costs onsulting & Student Grants Costs	ITLS - International Trauma Life Support	-	200,000	-	-	-	-	-	-	-	-	200
Consulting & Student Grants Costs Consultant - Facility Study 150,000 15	Reliability Management System software	-	30,810	14,270	4,510	4,600	4,690	4,780	4,880	4,980	5,080	78
Consultant - Facility Study Annual Student Grants Costs Whiter Operating Costs Uniforms And Clothing Annual Student Grants Costs Whiter Operating Costs Uniforms And Clothing Annual Student Grants Costs Whiter Operating Costs Uniforms And Clothing Annual Student Grants Costs Whiter Operating Costs Uniforms And Clothing Annual Student Grants Costs Whiter Operating Costs Whiter Operating Costs Uniforms And Clothing Annual Student Grants Costs Whiter Operating Costs Uniforms And Clothing Annual Student Grants Costs Whiter Operating Costs Annual Student Grants Costs Annual Student Grants Costs Whiter Operating Costs Annual Student Grants Costs Annual Student Grants Costs Annual Student Grants Co	raining Costs	-	230,810	14,270	4,510	4,600	4,690	4,780	4,880	4,980	5,080	278
Annual Student Grants for Guaranteed Employment Program - 250,000												
## Additional Costs Comparing & Student Grants Costs	• •	-		-	-	-	-	-	-	-	-	150
Uniforms And Clothing 37,520 9,570 9,760 9,960 10,160 10,360 10,570 10,780 11,000 11,220 Oxygen 11,000 2,810 2,870 2,930 2,990 3,050 3,110 3,170 3,230 3,290 Medical Supplies 152,6600 38,910 39,690 40,480 41,290 42,120 42,960 43,820 44,700 45,590 Laundry/Dry Cleaning Service 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Prescribed Medication Supplies 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Fuel-Unleaded Gasoline 96,680 24,650 25,140 51,280 26,150 26,670 27,200 27,740 56,580 28,860 Repairs & Maintenance - Auto 66,520 16,960 17,300 35,300 18,000 18,360 18,730 19,100 38,960 19,870 Transfer to Reserve for Vehicle & Equip Replacement (Amortization) 227,200 37,920 59,050 120,460 61,430 62,650 63,880 65,130 132,800 67,680 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 3,200 3,260 3,330 3,400 3,470 3,540 39,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 369,470 379,740 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 369,470 379,40 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 369,470 379,40 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 369,470 379,40 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 369,470 379,40 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 359,470 379,40 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 320,00 349,750 359,470 379,40 390,300 401,150 412,300 423,760 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 32		-		-	-	-	-	-	-		-	250
Uniforms And Clothing 37,520 9,570 9,760 9,960 10,160 10,360 10,570 10,780 11,000 11,220 10,000 11,000 2,810 2,810 2,870 2,930 2,990 3,050 3,110 3,170 3,230 3,290 10,000 Medical Supplies 152,600 38,910 38,910 38,900 40,480 41,290 42,120 42,960 43,820 44,700 45,590 12,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 11,			400,000	-	•	•	-	-	•			400
Oxygen 11,000 2,810 2,870 2,930 2,990 3,050 3,110 3,170 3,230 3,290 Medical Supplies 152,600 38,910 39,690 40,800 41,290 42,120 42,960 43,820 44,700 45,590 Laundry/Dry Cleaning Service 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Frescribed Medication Supplies 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Fuel-Unleaded Gasoline 96,680 24,650 25,140 51,280 26,570 27,200 27,740 56,580 28,860 Repairs & Maintenance - Auto 66,520 16,960 17,300 35,300 18,000 18,360 18,730 19,100 38,960 19,870 Transfer to Reserve for Vehicle & Equip Replacement (Amortization) 227,200 57,920 59,950 120,460 61,430 62,650 63,880 65,130 <td></td> <td>37 520</td> <td>9 570</td> <td>9.760</td> <td>9 960</td> <td>10 160</td> <td>10 360</td> <td>10 570</td> <td>10 780</td> <td>11 000</td> <td>11 220</td> <td>130</td>		37 520	9 570	9.760	9 960	10 160	10 360	10 570	10 780	11 000	11 220	130
Medical Supplies 152,600 38,910 39,690 40,480 41,290 42,120 42,960 43,820 44,700 45,590 Laundry/Dry Cleaning Service 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Prescribed Medication Supplies 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950											1	38
Laundry/Dry Cleaning Service 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Prescribed Medication Supplies 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 Fuel-Unleaded Gasoline 96,680 24,650 25,140 51,280 26,150 26,670 27,200 27,740 56,580 28,860 Repairs & Maintenance - Auto 66,520 16,960 17,300 35,300 18,000 18,360 18,730 19,100 38,960 19,870 17,000 18												532
Prescribed Medication Supplies 40,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 12,950 12,9												139
Repairs & Maintenance - Auto 66,520 16,960 17,300 35,300 18,000 18,360 18,730 19,100 38,960 19,870 Transfer to Reserve for Vehicle & Equip Replacement (Amortization) 227,200 57,920 59,050 120,460 61,430 62,650 63,880 65,130 132,800 67,680 Building Operating Costs of New Facility (utilities, maintenance, etc.) 160,000 3,200 3,260 3,330 3,400 3,470 3,540 3,610 3,680 3,750 Interest Payment for New Facility 241,900 232,700 223,200 213,500 203,500 193,200 182,700 171,800 160,600 149,200 1, ther Operating Costs 14,404,520 747,410 750,820 857,930 758,030 761,700 765,510 769,280 887,290 777,120 8, ross Operating Costs 5,843,150 3,002,510 2,073,770 2,191,840 2,113,090 2,138,230 2,163,860 2,189,820 2,330,370 2,243,110 26, operating Costs 14,404,520 14,4		40,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	11,950	139
Transfer to Reserve for Vehicle & Equip Replacement (Amortization) 227,200 57,920 59,050 120,460 61,430 62,650 63,880 65,130 132,800 67,680 Building Operating Costs of New Facility (utilities, maintenance, etc.) 160,000 3,200 3,260 3,330 3,400 3,470 3,540 3,610 3,680 3,750 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 340,290 349,750 359,470 369,470 379,740 390,300 401,150 412,300 423,760 3, Interest Payment for New Facility 241,900 232,700 223,200 213,500 203,500 193,200 182,700 173,800 160,600 149,200 1, there Operating Costs 1,404,520 747,410 750,820 857,930 758,030 761,700 765,510 769,280 887,290 777,120 8, ross Operating Costs 5,843,150 3,002,510 2,073,770 2,191,840 2,113,090 2,183,230 2,163,860 2,189,820 2,330,370 2,243,110 26, particles of Funding Tax Stabilization Reserve 1 (2,921,575)	Fuel-Unleaded Gasoline	96,680	24,650	25,140	51,280	26,150	26,670	27,200	27,740	56,580	28,860	390
Building Operating Costs of New Facility (utilities, maintenance, etc.) 160,000 3,200 3,260 3,330 3,400 3,470 3,540 3,610 3,680 3,750 Principal Repayment for New Facility (utilities, maintenance, etc.) 160,000 3,200 349,750 359,470 369,470 379,740 390,300 401,150 412,300 423,760 3, Interest Payment for New Facility 241,900 223,700 233,000 233,500 193,200 182,700 171,800 160,600 149,200 1, ther Operating Costs 1,404,520 747,410 750,820 857,930 758,030 761,700 765,510 769,280 887,290 777,120 8, 700 700,000		66,520				18,000		18,730	19,100		1	269
Principal Repayment for New Facility 331,100 340,290 349,750 359,470 369,470 379,740 390,300 401,150 412,300 423,760 3, Interest Payment for New Facility 241,900 232,700 223,200 213,500 203,500 193,200 182,700 171,800 160,600 149,200 1, ther Operating Costs 1,404,520 747,410 750,820 857,930 758,030 761,700 765,510 769,280 887,290 777,120 8, corces of Funding 2 2,703,770 2,191,840 2,113,090 2,183,250 2,189,820 2,330,370 2,243,110 26, corces of Funding 2 2,221,575 -												918
Interest Payment for New Facility 241,900 232,700 223,200 213,500 203,500 193,200 182,700 171,800 160,600 149,200 1, ther Operating Costs 5,843,150 3,002,510 2,073,770 2,191,840 2,113,090 2,138,230 2,163,860 2,189,820 2,330,370 2,243,110 26, oursees of Funding Tax Stabilization Reserve											1	191
ther Operating Costs 1,404,520 747,410 750,820 857,930 758,030 761,700 765,510 769,280 887,290 777,120 8, ross Operating Costs 5,843,150 3,002,510 2,073,770 2,191,840 2,113,090 2,138,230 2,163,860 2,189,820 2,330,370 2,243,110 26, sources of Funding Tax Stabilization Reserve¹ (2,921,575) (2, Ministry Funding - LASG Agreement² - (2,924,775) (1,668,610) (1,199,510) (1,253,685) (1,209,310) (1,216,745) (1,224,280) (1,231,835) (1,296,535) (13,												3,757
ross Operating Costs 5,843,150 3,002,510 2,073,770 2,191,840 2,113,090 2,138,230 2,163,860 2,189,820 2,330,370 2,243,110 26, ources of Funding Tax Stabilization Reserve ¹ (2,921,575)	· · · · · · · · · · · · · · · · · · ·											1,972
cources of Funding (2,921,575) -												8,479
Tax Stabilization Reserve ¹ (2,921,575) (2, Ministry Funding - LASG Agreement ² - (2,924,775) (1,668,610) (1,199,510) (1,253,685) (1,209,310) (1,216,745) (1,224,280) (1,231,835) (1,296,535) (13, Ministry Funding - LASG Agreement ² - (2,924,775) (1,668,610) (1,199,510) (1,253,685) (1,209,310) (1,216,745) (1,224,280) (1,231,835) (1,296,535) (1,324,242) (1,241,2		5,843,150	3,002,510	2,073,770	2,191,840	2,113,090	2,138,230	2,163,860	2,189,820	2,330,370	2,243,110	26,289
Ministry Funding - LASG Agreement ² - (2,924,775) (1,668,610) (1,199,510) (1,253,685) (1,209,310) (1,216,745) (1,224,280) (1,231,835) (1,296,535) (13,		(2 921 575)										(2,921
	ron stabilization reserve	(2,721,3/3)						-				
otal Sources of Funding (2,921,575) (2,924,775) (1,668,610) (1,199,510) (1,253,685) (1,209,310) (1,216,745) (1,224,280) (1,231,835) (1,296,535) (16,			(2 924 775)	(1 668 610)	(1 100 510)	(1 252 685)	(1 200 210)	(1 216 7/15)	(1 224 280)	(1 231 835)	(1 296 535)	(12 225

apital Costs Details	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
ehicles - Quantity	2025	2020	2023	2020		2020		2000	2002	2002	Total
New Ambulances - Growth	1	1	1	2	1	1	1	1	2	1	12
New Ambulances - Demand	1	1	1							_	3
ehicles - Costs	-		-								
New Ambulances - Growth	340,790	347,500	354,300	722,800	368,600	375,900	383,300	390,800	796,800	406,100	4,486
New Ambulances - Demand	340,790	347,500	354,300	-	-	-	-	-	_	-	1,042
ehicles - Gross Costs	681,580	695,000	708,600	722,800	368,600	375,900	383,300	390,800	796,800	406,100	5,52
ources of Funding											
DC Debt Funded	(298,000)	(304,000)	(310,000)	-	-	-	-	-	-	-	(912
DC Reserve Funded	(263,000)	(268,000)	(273,000)	(279,000)	-	-	-	-	-	-	(1,08
Unallocated Capital Levy	(30,000)	-	-	-	-	-	-	-	-	-	(3)
otal Sources of Funding	(591,000)	(572,000)	(583,000)	(279,000)	-			-		-	(2,02
et Capital Costs - Vehicles	90,580	123,000	125,600	443,800	368,600	375,900	383,300	390,800	796,800	406,100	3,50
acility - Costs	1										
New or Retrofit Facility	13,500,000	-	-	-	-	-	-	-	-	-	13,50
acility - Gross Costs	13,500,000		-		•		•			-	13,50
ources of Funding											
WIP Funding - Station 32	(300,000)	-	-	-	-	-	-	-	-	-	(30
DC Debt Funding	(4,500,000)	-	-	-	-	-	-	-	-	-	(4,50
Debt Funding	(8,700,000)	-	-	-	-	-	-	-	-	-	(8,70
otal Sources of Funding	(13,500,000)	•	•	•	•		•	•	•	-	(13,50
et Capital Costs - Facility	-	122.000	125.000	442.000	250.500	275.000	202.200	-	705.000	405.400	3.50
et Capital Costs - Vehicles and Facility	90,580	123,000	125,600	443,800	368,600	375,900	383,300	390,800	796,800	406,100	
perating Costs Details	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Tota
affing Plan - FTE											
Ambulance Staffing - Growth	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	100.
Ambulance Staffing - Demand	10.00	10.00	5.00	-	-	-	-	-	-	-	25.0
Logistics Technicians	-	4.00	-	TBD	-	-	-	-	-	-	4.0
Cardiac Safe City Lead	-	-	TBD	-	-	-	-	-	-	-	
Reliability Management System Lead	1	TBD	-		-		-		_	-	
Cultural Liaison	-	TBD -	TBD	-	-	-		-	-	-	
Managerial Development Position	-	TBD	TBD	-	-	-	-	-	-	-	
Supervisors otal FTE	20.00	24.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	129.0
taffing Plan - Gross Costs	20.00	24.00	13.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	125.0
Ambulance Staffing - Growth	1,268,180	1,288,270	1,308,680	1,329,400	1,350,460	1,371,840	1,393,570	1,415,660	1,438,100	1,460,910	13,62
Ambulance Staffing - Demand	1,268,180	1,288,270	654,340	-	-,,	-	-,,	-,,	-,,	-,,.	3,21
Logistics Technicians	-	336,020	-	TBD	-	-	-	-	-	-	33
Cardiac Safe City Lead	-	-	TBD	-	-	-	-	-	-	-	ī
Reliability Management System Lead	-	TBD	-	-	-	-	-	-	-	-	Ī
Cultural Liaison	-	TBD	-	-	-	-	-	-	-	-	Ī
Managerial Development Position	-	-	TBD	-	-	-	-	-	-	-	
Supervisors	-	TBD	TBD	-	-	-	-	-	-	-	i
affing Plan - Gross Costs	2,536,360	2,912,560	1,963,020	1,329,400	1,350,460	1,371,840	1,393,570	1,415,660	1,438,100	1,460,910	17,17
raining Costs											
perating Costs Details	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Tota
ITLS - International Trauma Life Support	-	200,000	-	-	-	-	-	-	-	-	20
Reliability Management System software	-	30,810	14,270	4,510	4,600	4,690	4,780	4,880	4,980	5,080	7
raining Costs	-	230,810	14,270	4,510	4,600	4,690	4,780	4,880	4,980	5,080	27
onsulting & Student Grants Costs											
Consultant - Facility Study	-	150,000	-	-		-	-	-	-	-	15
Annual Student Grants for Guaranteed Employment Program	-	250,000	-	-	-	-	-	-	-	-	25
onsulting & Student Grants Costs	-	400,000	-					-		-	40
ther Operating Costs											
Uniforms And Clothing	18,760	19,140	19,520	9,960	10,160	10,360	10,570	10,780	11,000	11,220	13
Oxygen	5,500	5,620	5,740	2,930	2,990	3,050	3,110	3,170	3,230	3,290	3
Medical Supplies	76,300	77,820	79,380	40,480	41,290	42,120	42,960	43,820	44,700	45,590	53
Laundry/Dry Cleaning Service	20,000	20,400	20,800	10,610	10,820	11,040	11,260	11,490	11,720	11,950	14
Prescribed Medication Supplies	20,000	20,400	20,800	10,610	10,820	11,040	11,260	11,490	11,720	11,950	14
Fuel-Unleaded Gasoline	48,340	49,300	50,280	51,280	26,150	26,670	27,200	27,740	56,580	28,860	39
Repairs & Maintenance - Auto	33,260	33,920	34,600	35,300	18,000	18,360	18,730	19,100	38,960	19,870	27
Transfer to Reserve for Vehicle & Equip Replacement (Amortization)	113,600	115,840	118,100	120,460	61,430	62,650	63,880	65,130	132,800	67,680	92
Building Operating Costs of New Facility (utilities, maintenance, etc.)	160,000	3,200	3,260	3,330	3,400	3,470	3,540	3,610	3,680	3,750	19
Principal Repayment for New Facility	331,100	340,290	349,750	359,470	369,470	379,740	390,300	401,150	412,300	423,760	3,75
Interest Payment for New Facility	241,900	232,700	223,200	213,500	203,500	193,200	182,700	171,800	160,600	149,200	1,97
ther Operating Costs	1,068,760	918,630	925,430	857,930	758,030	761,700	765,510	769,280		777,120	8,48
ross Operating Costs	3,605,120	4,462,000	2,902,720	2,191,840	2,113,090	2,138,230	2,163,860	2,189,820	2,330,370	2,243,110	26,34
ources of Funding											
		i									14.00
Tax Stabilization Reserve ¹	(1,802,560)	-	-	-	-	-	-	-	─	-	
	(1,802,560)	(1,805,760)	(2,398,355)	(1,613,985)	(1,253,685)	(1,209,310)	(1,216,745)	(1,224,280)	(1,231,835)	(1,296,535)	(1,80) (13,25) (15,05)

apital Costs Details	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
ehicles - Quantity											
New Ambulances - Growth	1	1	1	2	1	1	1	1	2	1	12
New Ambulances - Demand	-	-	-	-	-	-	-	-	-	-	
ehicles - Costs											
New Ambulances - Growth	340,790	347,500	354,300	722,800	368,600	375,900	383,300	390,800	796,800	406,100	4,486
New Ambulances - Demand		-	-	-	-	-	-	-	-	-	
ehicles - Gross Costs	340,790	347,500	354,300	722,800	368,600	375,900	383,300	390,800	796,800	406,100	4,48
ources of Funding					ı						
DC Debt Funded	(298,000)	(304,000)	(310,000)	(270,000)	-	-	-	-	-	-	(91
DC Reserve Funded Unallocated Capital Levy	(42,790)	(43,500)	(44,300)	(279,000)	-	-	-	-	-	-	(40
otal Sources of Funding	(340,790)	(347,500)	(354,300)	(279,000)	-	-		-	-	-	(1,32
let Capital Costs - Vehicles	-	-	-	443,800	368,600	375,900	383,300	390,800	796,800	406,100	3,16
acility - Costs		_	_								_
New or Retrofit Facility	13,500,000	-	-	-	-	-	-	-	-	-	13,50
acility - Gross Costs	13,500,000		-	-	-		-	-	-	-	13,50
ources of Funding											
WIP Funding - Station 32	(300,000)	-	-	-	-	-	-	-	-	-	(30
DC Debt Funding	(4,500,000)	-	-	-	-	-	-	-	-	-	(4,50
Debt Funding	(8,700,000)	-	-	-	-	-	-	-	-	-	(8,70
otal Sources of Funding	(13,500,000)			-	-						(13,50
let Capital Costs - Facility				-	-	-	-	-	-	-	
let Capital Costs - Vehicles and Facility				443,800	368,600	375,900	383,300	390,800	796,800	406,100	3,16
Pperating Costs Details	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Tota
taffing Plan - FTE					ı						
Ambulance Staffing - Growth	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	100.
Ambulance Staffing - Demand	-	4.00		TDD	-	-	-	-	-	-	4.0
Logistics Technicians Cardiac Safe City Lead	-	4.00	TBD	TBD -	-	-	-	-	-	-	4.0
Reliability Management System Lead	-	TBD	IBU	-	-	-	-	-	-	-	
Cultural Liaison		TBD			_	_			-		
Managerial Development Position	-	-	TBD	-	-	-	-	-	-	-	
Supervisors	<u> </u>	TBD	TBD	-	-	-	-	-	_	-	
otal FTE	10.00	14.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	104.0
taffing Plan - Gross Costs											
Ambulance Staffing - Growth	1,268,180	1,288,270	1,308,680	1,329,400	1,350,460	1,371,840	1,393,570	1,415,660	1,438,100	1,460,910	13,62
Ambulance Staffing - Demand	-	-	-	-	-	-	-	-	-	-	
Logistics Technicians	-	336,020	-	TBD	-	-	-	-	-	-	33
Cardiac Safe City Lead	-	-	TBD	-	-	-	-	-	-	-	
Reliability Management System Lead	-	TBD	-	-	-	-	-	-	-	-	
Cultural Liaison	-	TBD	-	-	-	-	-	-	-	-	
Managerial Development Position	-		TBD	-	-	-	-	-	-	-	
Supervisors	4 300 400	TBD	TBD	4 220 400	4 350 460	4 274 040	4 202 570	4 445 660	4 430 400	4 450 040	13,96
taffing Plan - Gross Costs	1,268,180	1,624,290	1,308,680	1,329,400	1,350,460	1,371,840	1,393,570	1,415,660	1,438,100	1,460,910	13,96
raining Costs perating Costs Details	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Tota
	-		-	-	- 2027	-	-		-	-	
ITLS - International Trauma Life Support	-	200,000 30,810		4,510	4,600				4,980	5,080	20
Reliability Management System software raining Costs		230,810	14,270 14,270	4,510	4,600	4,690 4,690	4,780 4,780	4,880 4,880	4,980	5,080	27
onsulting & Student Grants Costs		230,810	14,270	4,310	4,000	4,030	4,780	4,000	4,360	3,080	21
Consultant - Facility Study	_	150,000	-	_	_	-	-	_	_	_	15
Annual Student Grants for Guaranteed Employment Program		250,000	-	-	-	-	-	_		-	25
onsulting & Student Grants Costs		400,000									40
other Operating Costs											
Uniforms And Clothing	9,380	9,570	9,760	9,960	10,160	10,360	10,570	10,780	11,000	11,220	10
Oxygen	2,750	2,810	2,870	2,930	2,990	3,050	3,110	3,170	3,230	3,290	3
Medical Supplies	38,150	38,910	39,690	40,480	41,290	42,120	42,960	43,820	44,700	45,590	41
Laundry/Dry Cleaning Service	10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	11,950	10
Prescribed Medication Supplies	10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	11,950	10
Fuel-Unleaded Gasoline	24,170	24,650	25,140	51,280	26,150	26,670	27,200	27,740	56,580	28,860	31
Repairs & Maintenance - Auto	16,630	16,960	17,300	35,300	18,000	18,360	18,730	19,100	38,960	19,870	21
Transfer to Reserve for Vehicle & Equip Replacement (Amortization)	56,800	57,920	59,050	120,460	61,430	62,650	63,880	65,130	132,800	67,680	74
	160,000	3,200	3,260	3,330	3,400	3,470	3,540	3,610	3,680	3,750	19
Building Operating Costs of New Facility (utilities, maintenance, etc.)		340,290	349,750	359,470	369,470	379,740	390,300	401,150	412,300	423,760	3,75
Principal Repayment for New Facility	331,100		00		203,500	193,200	182,700	171,800	160,600	149,200	1,97
Principal Repayment for New Facility Interest Payment for New Facility	241,900	232,700	223,200	213,500			765.040		007.000		
Principal Repayment for New Facility Interest Payment for New Facility Ither Operating Costs	241,900 900,880	232,700 747,410	750,820	857,930	758,030	761,700	765,510	769,280	887,290	777,120	7,97
Principal Repayment for New Facility Interest Payment for New Facility Ither Operating Costs ross Operating Costs	241,900	232,700					765,510 2,163,860		887,290 2,330,370		7,97 22,61
Principal Repayment for New Facility Interest Payment for New Facility ther Operating Costs ross Operating Costs ources of Funding	241,900 900,880 2,169,060	232,700 747,410	750,820	857,930	758,030	761,700		769,280		777,120	22,61
Principal Repayment for New Facility Interest Payment for New Facility ther Operating Costs ross Operating Costs	241,900 900,880	232,700 747,410	750,820	857,930	758,030	761,700		769,280		777,120	

APPENDICES

Appendix A-1: Hamilton Paramedic Service Citizen Survey 2018

City of Hamilton

Hamilton Paramedic Service

Citizen Survey 2018

Results Summary



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Background

The Hamilton Paramedic Service Citizen Survey 2018 is the Hamilton Paramedic Service's first citizen survey. The main objective of the survey is to gain a better understanding of residents' expectations and satisfaction levels regarding the services provided by the Hamilton Paramedic Service.

The findings from the Hamilton Paramedic Service Survey 2018 will help to inform the Hamilton Paramedic Service Multi-Year Plan.

Survey Methods and Administration

The survey tool and questions were developed by a project team comprised of members of the Hamilton Paramedic Service leadership team and City staff based on the identified objectives of the survey. The survey tool can be found in Appendix A.

A third party vendor, Metroline Research Group Inc. was contracted to conduct the survey through Computer Assisted Telephone Interviews (CATI). Hamilton based residential and cellular phone lines were randomly called and residents were invited to participate in the survey. To qualify for participation in the survey, the respondent had to be an adult age 18 years or over residing in Hamilton. For residential lines, the adult in the household with the most recent birthday was interviewed. For cellular lines, the person answering the call would be interviewed provided they met the age and residency requirements. The telephone surveys were conducted between March 2nd, 2018 and March 19th, 2018.

To supplement the telephone interviews and allow more residents to participate in the survey, an online version of the survey tool was made available on the City of Hamilton website. A banner advertising the survey with the survey link was placed on the most frequently visited pages on www.hamilton.ca. A list of the web pages where the banner was placed can be found in Appendix B. The online survey was active between February 26th and March 18th, 2018.

Both the telephone and online version of the survey was available in English and French.



Survey Response and Report Notes

Metroline who conducted the telephone survey called approximately 15,938 randomly selected Hamilton based phone numbers and collected 550 completed responses.

The results of the telephone survey are accurate to +/- 4.2%, 19 out of 20 times (95% confidence interval) for the City of Hamilton residents. Data for subgroups of the total respondent universe would have a larger margin of error.

The online survey collected 277 surveys where a response was provided for at least one (1) survey question.

The findings presented in this report will primarily focus on the data collected through the phone survey which is a statistically representative sample of the City of Hamilton population. The results of the online survey are also provided as a supplementary source of information. It should be noted that the results from the two data sources should not be compared due to differences in survey methodologies. While the online survey expanded the opportunity for residents to participate in the survey, this survey methodology may be subject to self-selection bias and the collected surveys cannot be determined to be a statistically representative sample of the population.

For both the phone and online survey, respondents did not always provide a response to every question or may have responded "don't know". For some analyses these missing or "don't know" records have been removed. Hence, the universe of respondents (n) will vary for each question. The universe of respondents (n) is provided for all reported data and a full breakdown of responses including the missing and "don't know" response counts is provided in Appendix C.

Data shown may not add up to 100% due to rounding.

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Hamilton Paramedic Service Citizen Survey 2018 - Report

Key Findings

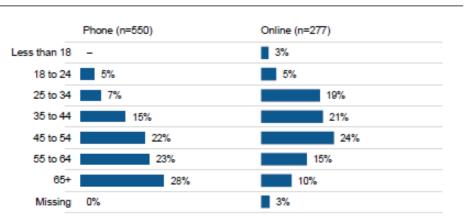
The Respondents

The following section provides some descriptors of the survey sample population such as age, gender and household income. These respondent characteristics provide some context of collected responses and may be helpful to keep in mind when reviewing survey results.

The following is the age, gender composition and household income for respondents from both the phone and online survey.

Over half (51%) of the phone survey respondents were over the age of 55.

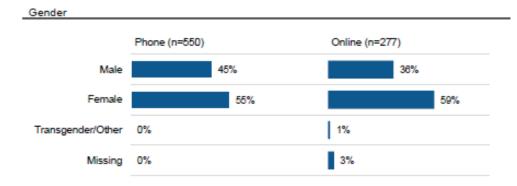




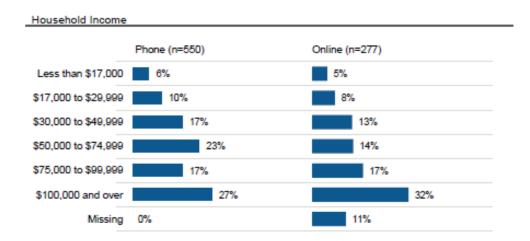
Survey Summary



There were more female phone survey respondents than males.



Approximately 27% of phone survey respondents indicate their household income to be \$100,000 or more.



Survey Summary

Page | 4



What the Hamilton Paramedic Service does

As a lead in to the survey and to gain an understanding of what respondents think the Hamilton Paramedic Service does, the survey began with asking respondents to describe what they felt the Hamilton Paramedic Service does. A total of 746 responses to this question was collected from the phone and online survey. The following are the most common descriptions respondents from both the phone and online survey provided about what the Hamilton Paramedic Service does, listed in order by precedence.

Description/theme area of what Hamilton Paramedic Service does provided by respondents	Approximate number of mentions
Responds to "emergency" situations, emergency medical/illness, 911/emergency calls, accidents and life threatening situations	359
Provides transportation to the hospital or provides ambulance services	234
First responders, first to arrive on scene, are quick and responsive	95
Provides medical care	91
Provides pre-hospital care (at scene, en route to hospital, etc.), stabilizing a person's condition, providing an assessment of condition	85
Provides "help" or "care" to people in need	83
Saves lives, rescues	53
Stays with patients at hospitals until they are attended to by a doctor	21
Essential service	14
Provides First Aid	14

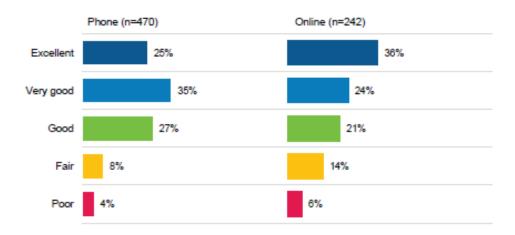


Rating of the Hamilton Paramedic Service

Approximately 29% of phone survey respondents indicate having called 911 for an ambulance in the past two years for either themselves or a family member.

Based on either their experience or knowledge, the majority of respondents rated the services provided by the Hamilton Paramedic Service to be excellent, very good or good.

Based on your experience or knowledge of services provided by the Hamilton Paramedic Service, how would you rate the services provided by the Hamilton Paramedic Service?



Respondents that rated the Hamilton Paramedic Service as poor were asked to explain their rating. The most common reasons for a poor rating given by respondents from both the phone and online survey were:

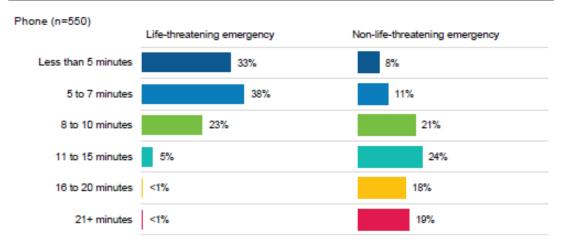
- Paramedics were rude or had a bad attitude
- Response time was slow
- 3. Incorrect/improper diagnosis was provided
- 4. Paramedics provided bad service
- 5. Reference to the Yosif Al-Hasnawi incident



Response Time and Service Expectations

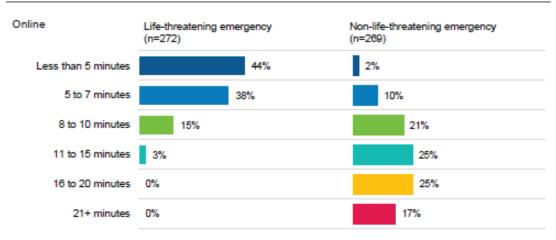
Survey respondents' expectations of response time were very different for life-threatening emergencies and non-life threatening situations. The majority of phone survey respondents expect a response time of less than 10 minutes for life threatening emergencies. For non-life threatening emergencies, the majority of phone survey respondents expect a response time of 11 minutes or more.

Considering driving time and traffic, how many minutes do you think is acceptable for paramedics to arrive for...



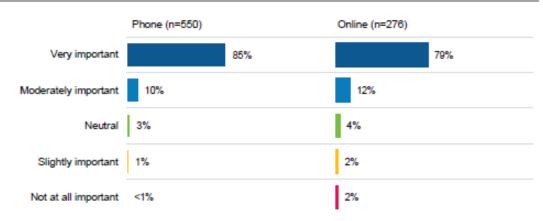


Considering driving time and traffic, how many minutes do you think is acceptable for paramedics to arrive for...



The majority (85%) of phone survey respondents felt it was very important for the paramedic dispatcher to provide care instructions over the phone prior to paramedics' arrival.

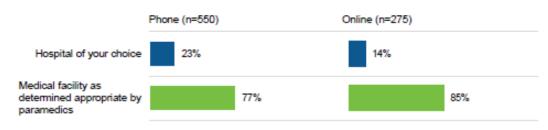
Consider the situation where you have called for an ambulance. How important is it to you for the paramedic dispatcher to provide care instructions to you over the phone prior to the paramedics' arrival?





The majority of phone survey respondents felt that they should be transported to a medical facility determined by paramedics to be most appropriate for their condition rather than to a hospital of their choice.

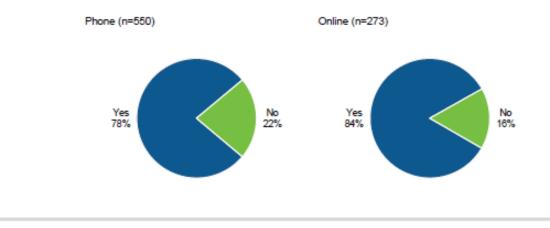
The paramedics arrive and assess your condition. They determine you have a minor non-life threatening medical issue (such as a broken bone) that requires further medical care. Which one of the following two options best reflects where you feel you should be transported to?



Awareness of and Opinion of "Off-Load Delay

Approximately 78% of phone survey respondents are aware of the "Off-Load Delay" situation at hospitals.

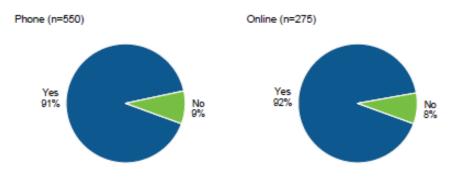
You are taken by the ambulance to a hospital where you must wait to be seen by hospital staff. Are you aware of the current situation at hospitals known as "Off-Load Delay", where paramedics must wait with their patient until hospital staff assumes care?





The majority (91%) of phone survey respondents felt it would be acceptable for a paramedic to leave to respond to another 911 emergency call after settling a person with a non-life threatening medical issue in the emergency waiting room.

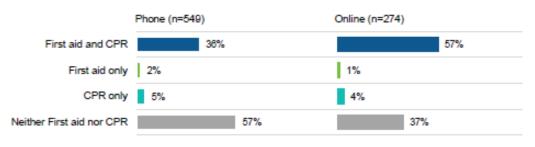
Considering you have a non-life threatening medical issue, do you feel it would be acceptable for the paramedic to settle you in the emergency waiting room and then leave to respond to another 911 emergency call?



Completion of First Aid Course and CPR course

Approximately 36% of phone survey respondents have completed both a first aid course and a CPR course in the past 2 years and 57% have completed neither.

Have you or anyone in your household taken a first aid course in the past 2 years? Have you or anyone in your household taken a CPR (Cardio-pulmonary resuscitation) course in the past 2 years?





Respondents who Have Called 911 in the Past 2 Years

There was 29% (158) of respondents from the phone survey that indicated having called 911 in the past 2 years either for themselves or for a family member.

Have you called 911 for an ambulance in the past 2 years, either for yourself or for a family member?

Phone (n=550)



In this section, responses from phone survey respondents that have called 911 for an ambulance in the past 2 years is compared to responses from respondents who have not called 911 for an ambulance in the past 2 years.

Differences between the responses from the two groups are indicated as follows:

- Red font significantly lower
- Black font no significant difference
- · Green font significantly higher

Survey Summary

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Based on your experience or knowledge of services provided by the Hamilton Paramedic Service, how would you rate the services provided by the Hamilton Paramedic Service?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Excellent	37%	19%
Very good	37%	34%
Good	17%	33%
Fair	5%	10%
Poor	4%	5%

Considering driving time and traffic, how many minutes do you think is acceptable for paramedics to arrive for a life-threatening emergency such as loss of consciousness or seizures?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Less than 5 minutes	34%	33%
5 to 7 minutes	40%	38%
8 to 10 minutes	23%	22%
11 to 15 minutes	1%	6%
16 to 20 minutes	1%	1%
21+ minutes	0%	1%



Considering driving time and traffic, how many minutes do you think is acceptable for paramedics to arrive for a non-life-threatening emergency such as a broken bone

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Less than 5 minutes	7%	8%
5 to 7 minutes	10%	12%
8 to 10 minutes	25%	20%
11 to 15 minutes	27%	22%
16 to 20 minutes	18%	17%
21+ minutes	13%	21%

Consider the situation where you have called for an ambulance. How important is it to you for the paramedic dispatcher to provide care instructions to you over the phone prior to the paramedics' arrival?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Very important	79%	88%
Moderately important	15%	7%
Neutral	3%	3%
Slightly important	2%	1%
Not at all important	1%	1%



The paramedics arrive and assess your condition. They determine you have a minor non-life threatening medical issue (such as a broken bone) that requires further medical care. Which one of the following two options best reflects where you feel you should be transported to?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Hospital of your choice	18%	25%
Medical facility determined by the paramedics to be most appropriate to deal with your condition, which may be either a hospital, urgent care centre or walk in clinic etc.	82%	76%

You are taken by the ambulance to a hospital where you must wait to be seen by hospital staff. Are you aware of the current situation at hospitals known as "Off-Load Delay", where paramedics must wait with their patient until hospital staff assumes care?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Yes	86%	75%
No	14%	26%



Hamilton Paramedic Service Citizen Survey 2018 - Report

Considering you have a non-life threatening medical issue, do you feel it would be acceptable for the paramedic to settle you in the emergency waiting room and then leave to respond to another 911 emergency call?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Yes	90%	92%
No	10%	8%

Have you or anyone in your household taken a first aid course in the past 2 years?

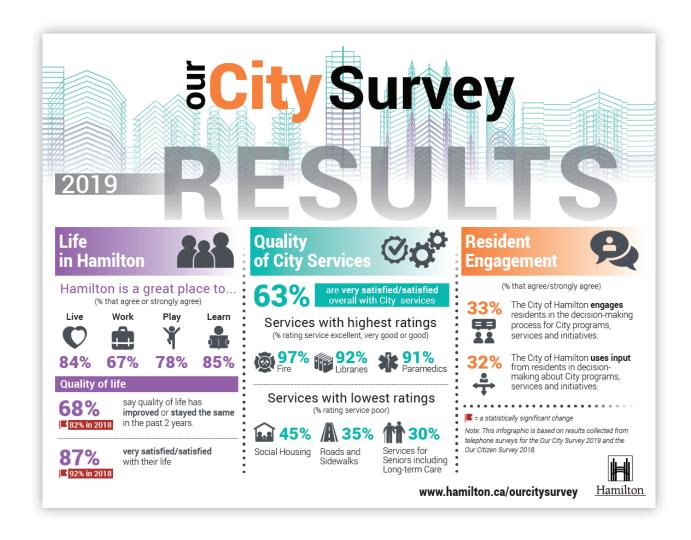
	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Yes	47%	35%
No	53%	65%

Have you or anyone in your household taken a CPR (Cardio-pulmonary resuscitation) course in the past 2 years?

	Has called 911 in the past 2 years	Has not called 911 in the past 2 years
Yes	48%	38%
No	52%	62%

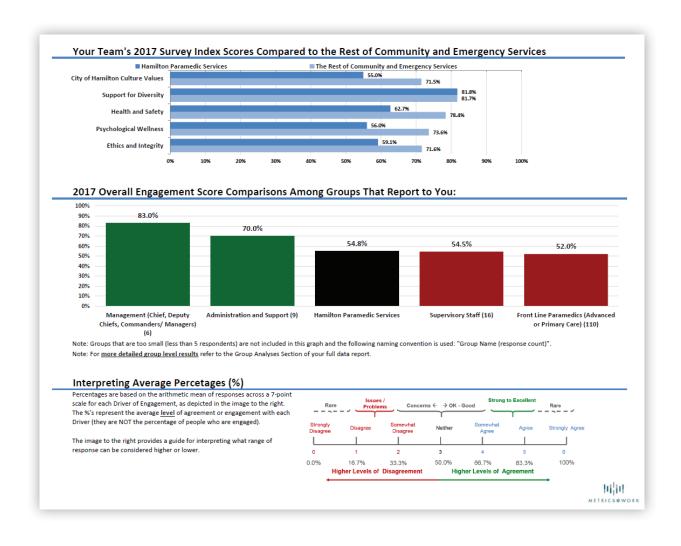
Survey Summary Page | 15

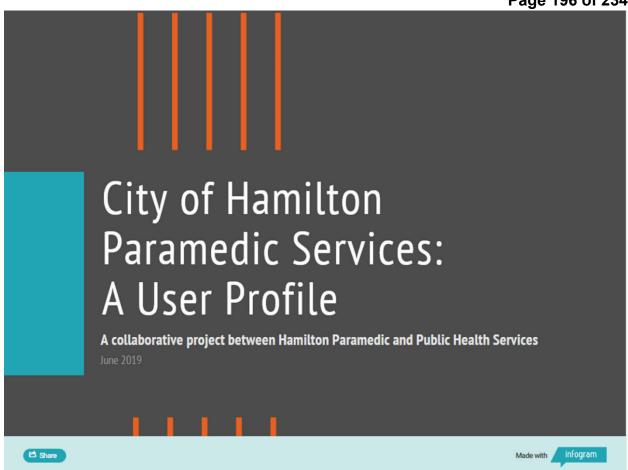
Appendix A-2: City of Hamilton Our City Survey 2019



Appendix A-3: City of Hamilton Our People Survey 2017 – Hamilton Paramedic Service Results

City of Hamilton - Our People Survey 2017 Summary Results For: Hamilton Paramedic Services Response Rate Summary City of Hamilton 4877 7549 64.6% *Community and Emergency Services (Your Parent Group) 1768 3292 53.7% Hamilton Paramedic Services (Your Team) 141 343 41.1% Your Team's 2017 Results Comparison **Possible Strengths Possible Opportunities for Improvement** Type (Top 5) (Bottom 5) ob: Satisfied with Resources and Supplies (37.2%) lob: Clarity (87.8%) Work Area: Continuous Improvement Practices (37.0%) Work Area: Support for Diversity (82.7%) 2017 Drivers of Engagement Div: Support for Diversity (80.6%) Org: Opportunities for Career Advancement (33.6%) (out of 48 measured) Org: Pride in Team / Division / Department (77.5%) Work Area: Team Morale (31.7%) lob: My Work Contributes to City's Vision and Mission (73.2%) Vork Area: Adequate Staffing and Attendance (23.6%) Work Area: Support for Diversity (0.1%) Work Area: Continuous Improvement Practices (-30.3%) 2017 Driver Results Job: Clarity (-0.1%) lob: Satisfied with Resources and Supplies (-31.6%) Compared to Div: Support for Diversity (-0.2%) Org: Opportunities for Career Advancement (-32.4%) the Rest of Community and Work Area: Importance of Mental Health (-0.4%) Vork Area: Team Morale (-37.5%) **Emergency Services** Work Area: Respectful Work Environment (-4.9%) Nork Area: Adequate Staffing and Attendance (-39.9%) This summary of results is intended to aid in the action planning process and for quick / easy communication of results. We strongly encourage you to review the detailed report for other possible areas of interest to help your team focus efforts toward positive change Your Team's 2017 Overall Engagement Score Compared to the Rest of Community and Emergency Services ■ Hamilton Paramedic Services ■ The Rest of Community and Emergency Services 54.8% Overall Engagement Score 10,10





Background

In 2018, there were 61,856 logged paramedic services calls that resulted in a patient interaction in the City of Hamilton. Having a better understanding of the characteristics of these users would facilitate service provision and potentially identify areas where linkage with existing or developed community supports would improve assistance to patients. The goal of this project was to create a profile of current paramedic services users focusing primarily the following:

- service use across the lifespan
- understanding the characteristics of people who access the service many times

This information should be considered alongside community and political preferences, research evidence, and resources or assets when making decisions.

Analysis:

An extract from the Interdev database created for paramedic call dates between January 1, 2018 and December 31, 2018 was cleaned to exclude logged calls where no patient was found, patients were transported by another ambulance, calls were cancelled by dispatch, out of service, stand by service, and any logged calls with a blank return priority code.

Descriptive statistics were generated to describe the identified final primary problems, patient age, call volume per patient, pick up location, time of day, return priority, and the destination facility. The final primary problem was categorized into groups based on the type of problem reported. Unique patients were identified using name and date of birth and where available OHIP number.



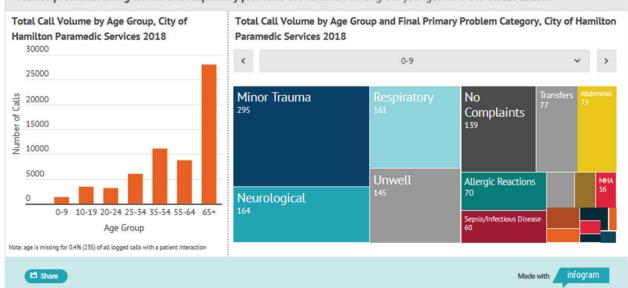
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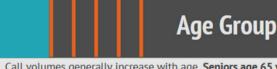
de with infogram

Primary Problem Overall the primary causes of logged Final Primary Problem for All Logged Paramedic Calls With a Patient Interaction, City of paramedic calls include: **Hamilton Paramedic Services 2018** -minor trauma (e.g. hemorrhage, musculoskeletal, traumatic soft tissue Abdominal & Back problems, injuries) Respiratory MHA - being unwell (e.g. symptoms of No Complaints weakness, dizziness) Transfers - abdominal & back problems (e.g. Fall abdominal/pelvic/rectal pain, back pain, Other/NOS nausea/vomiting/diarrhea, renal colic) Sepsis/Infectious Disease - respiratory symptoms (e.g. trouble Metabolic/Endocrine breathing, suspected respiratory infection, non-ischemic chest pain, exacerbated Obstetrical / Neonatal / Gynecological respiratory disease, respiratory obstructions), and Major Trauma Enviromental - mental health and addictions (e.g. alcohol intoxication, behavioural/ 2000 4000 6000 8000 10000 12000 psychiatric, withdrawal, failure to cope). Number of Calls Note: final primary problem is missing for 2.3% (1401) of all logged calls with a patient inter

Age Group

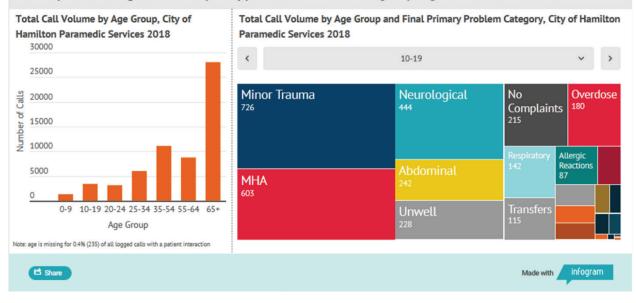
Call volumes generally increase with age. **Seniors age 65 years and older** make up 45% (28,007) of the total call volume followed by **adults age 35-54** (18%, n=11,140).





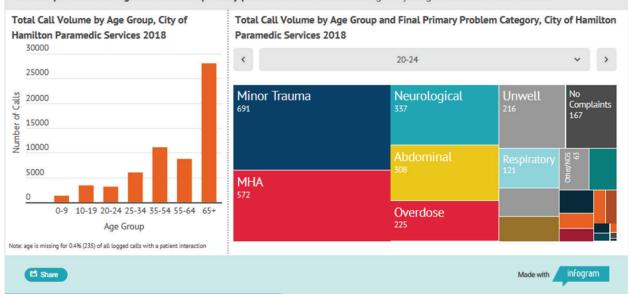
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Across all age groups, minor trauma is the most frequent problem. Among the youngest age groups, neurological problems such as seizures, loss/ diminished consciousness and having no complaints but requiring medical observation/ assessment feature prominently. Mental health & additions and overdoses are common problems among adults, as well as, abdominal & back related problems. Being unwell and respiratory problems are common among the youngest and the oldest callers.



Age Group

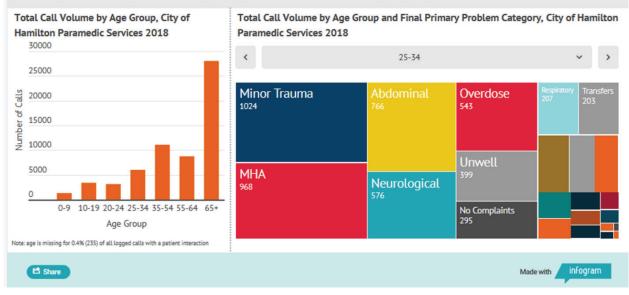
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Age Group

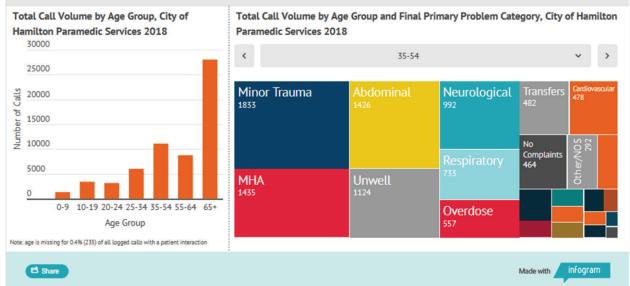
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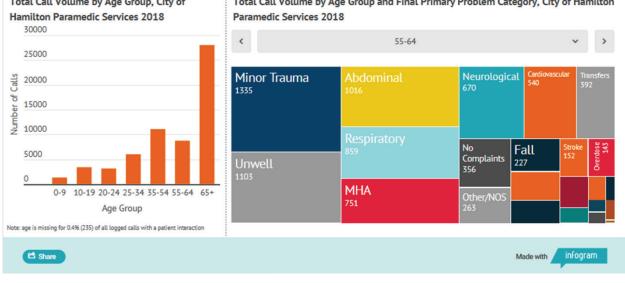


Age Group

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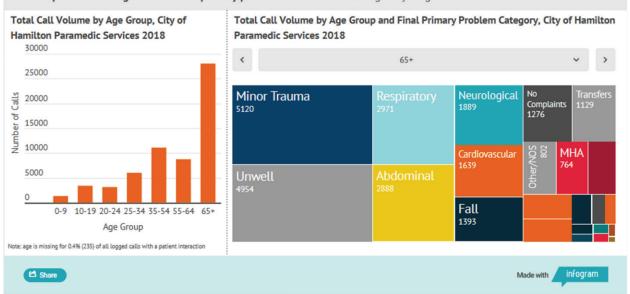


Age Group Call volumes generally increase with age. Seniors age 65 years and older make up 45% (28,007) of the total call volume followed by adults age 35-54 (18%, n=11,140). Across all age groups, minor trauma is the most frequent problem. Among the youngest age groups, neurological problems such as seizures, loss/ diminished consciousness and having no complaints but requiring medical observation/ assessment feature prominently. Mental health & additions and overdoses are common problems among adults, as well as, abdominal & back related problems. Being unwell and respiratory problems are common among the youngest and the oldest callers. Total Call Volume by Age Group, City of Total Call Volume by Age Group and Final Primary Problem Category, City of Hamilton Hamilton Paramedic Services 2018 Paramedic Services 2018 30000 55-64 25000 Minor Trauma 20000



Age Group

Call volumes generally increase with age. **Seniors age 65 years and older** make up 45% (28,007) of the total call volume followed by **adults age 35-54** (18%, n=11,140).

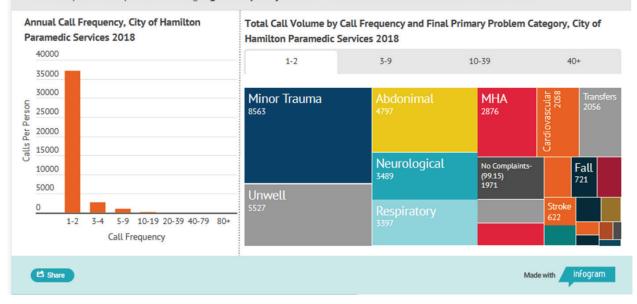


Call Frequency

The 61,856 paramedic calls in 2018 were made by **41,029 unique patients**. Ninety percent of callers called only 1 or 2 times during the 2018 calendar year. Nine percent of callers call 3 to 9 times.

Common problems among low frequency callers include minor trauma, being unwell, abdominal & back related problems, neurological problems, and respiratory problems.

The most prominent problem among higher frequency callers are mental health and addiction related issues.

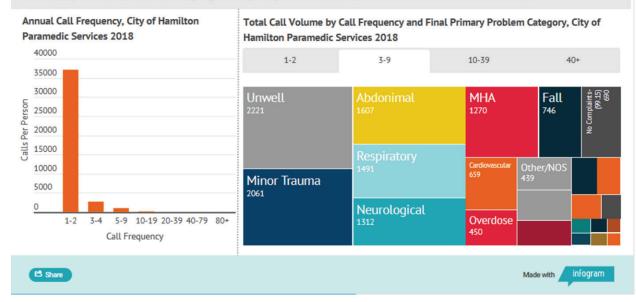


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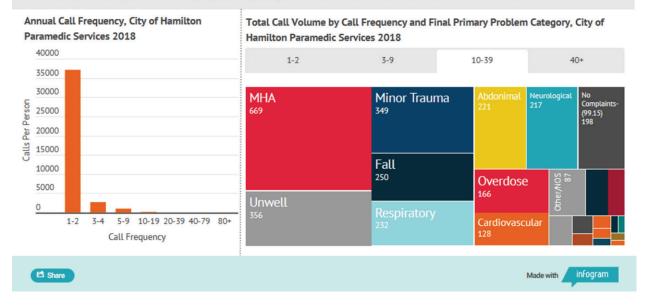


Call Frequency

The 61,856 paramedic calls in 2018 were made by **41,029 unique patients**. Ninety percent of callers called only 1 or 2 times during the 2018 calendar year. Nine percent of callers call 3 to 9 times.

Common problems among low frequency callers include minor trauma, being unwell, abdominal & back related problems, neurological problems, and respiratory problems.

The most prominent problem among higher frequency callers are mental health and addiction related issues.



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Call Frequency by Age Group & Time

Seniors are under-represented among high frequency callers.

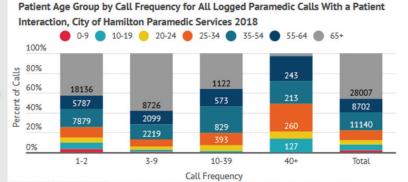
Seniors age 65 years and older represent 3% of the callers with 40 or more calls in the year (compared to 45% of calls overall).

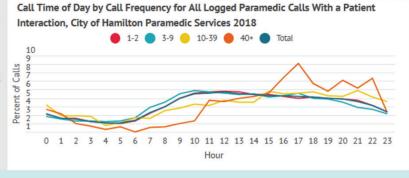
A higher proportion of high frequency callers are youth & young adults.

Youth age 10-19 represent 14% of the callers with 40 or more calls in the year (compared to 5% of calls overall). Adults age 25-34 represent 10% of all the paramedic service callers in 2018 but they represent 28% of the callers with 40 or more calls in the year.

Higher frequency callers call later in the day.

Calls between 4pm and 11pm represent 43% of the callers with 10-39 calls in the year and 53% of the callers with 40 or more calls per year (compared to 38% of calls overall).



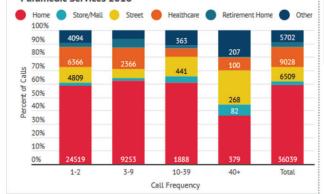


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Call Frequency by Location

Patient Pick Up Location by Call Frequency for All Logged Paramedic Calls With a Patient Interaction, City of Hamilton Paramedic Services 2018



A higher proportion of high frequency calls are picked up on the street.

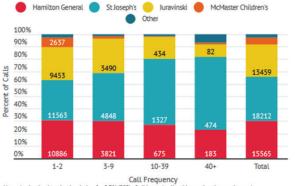
Patient pick up on the street represent 11% of all paramedic service callers in 2018. However, as call frequency increases past 10 calls, street pick up increases representing 14% of the callers with 10-39 calls in the year and 26% of the callers with 40 or more calls in the year.

Note: pick up location is missing for 1.5% (955) of all logged calls with a patient interaction

A higher proportion of higher frequency callers are transported to St. Joseph's hospital.

A patient destination of St. Joseph's hospital represents 35% of all paramedic patient trips in 2018. A higher proportion of high frequency callers are transport to St. Joseph's with 53% of the callers with 10-39 calls and 59% of the callers with 40 or more calls in the year being transported to that facility.

Patient Drop Off Location by Call Frequency for All Logged
Paramedic Calls With a Patient Interaction and Patient Transport,
City of Hamilton Paramedic Services 2018



Note: destination location is missing for 0.7% (382) of all logged calls with a patient interaction and transportation (i.e. includes return priority 0-4 only, n=51815)

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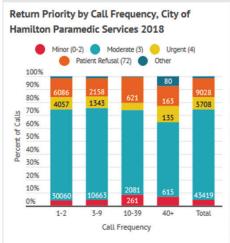
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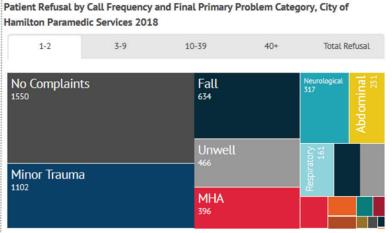
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Call Frequency By Return Priority

Overall, the majority of calls to paramedic services are categorized with a return priority of moderate (70%) and 9% of calls have a very urgent return priority. **Fifteen percent of callers refuse paramedic transport**. There is a higher proportion of calls identified as minor issues and patient refusals among those with a call frequency range of 10-39.

Common problems among patients who refuse paramedic transport include people with **no complaints** (i.e. dispatched to incident but no obvious injuries identified) and **falls including lift assists**. Among higher frequency callers, **mental health and addiction (e.g. behavioural/psychiatric calls)** related issues also feature predominantly for callers refusing paramedic transport.



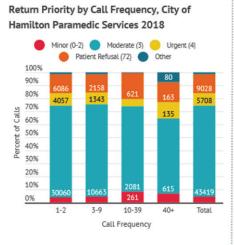


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Patient Refusal by Call Frequency and Final Primary Problem Category, City of Hamilton Paramedic Services 2018



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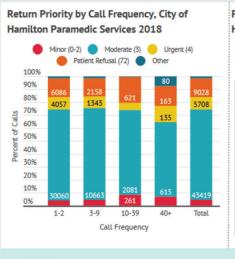
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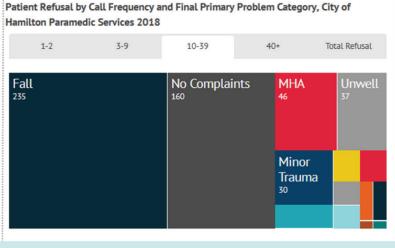
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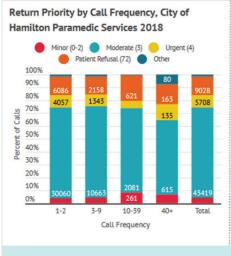
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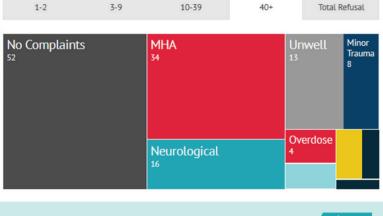
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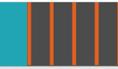
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Patient Refusal by Call Frequency and Final Primary Problem Category, City of Hamilton Paramedic Services 2018



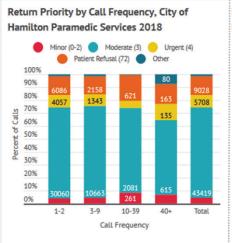
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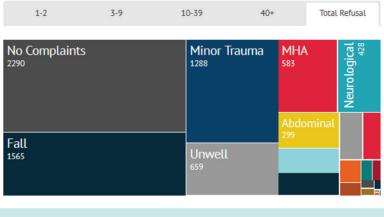
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Patient Refusal by Call Frequency and Final Primary Problem Category, City of Hamilton Paramedic Services 2018



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Key Messages



In 2018, there were 61,856 paramedic calls made by 41,029 unique patients



Seniors make up a large portion of the callers

Common problems include minor trauma, generally feeling unwell, abdominal or back problems, respiratory problems, and issues related to mental health & addictions



infogram

15% of callers refuse paramedic transport

- ▲ Fall/ Lift Assist
- ▲ No Complaints

High frequency callers make up a small proportion of callers but their needs are different



The most common problems among high frequency callers are mental health & addiction issues



Youth and young adults are overrepresented among high frequency callers

More high frequency callers are picked up on the street, transported later in the day, and taken to St. Joe's hospital



Many high frequency callers who refuse paramedic transport are related to mental health & addiction issues



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Appendix C-1: Sample Time on Task (ToT) Measurements - All Mondays in 2019

										1 JA	N - 31 D	EC 201	9											
MONDAY			1				1				1	URC	1	1			1		1		1		1	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
reek 1																								
reek 2	0.88	0.88	1.19	1.00	0.73	0.52	0.75	1.05	1.36	1.46	1.24	1.88	1.55	2.01	1.28	0.91	1.97	1.34	1.02	1.42	1.04	1.21	1.18	1.
reek 3	1.13	0.62	0.83	0.83	0.91	1.07	0.68	0.92	0.91	1.52	0.98	1.51	0.98	1.08	1.19	1.30	1.27	1.19	0.91	0.78	1.67	1.11	0.78	0.
reek 4	0.97	1.08	1.40	0.96	0.61	0.86	0.64	1.39	1.01	1.27	1.22	1.59	2.37	2.55	1.34	2.02	1.36	1.04	1.38	1.05	1.25	1.12	0.91	1.
veek 5	0.72	1.19	1.39	1.32	1.10	2.05	1.30	0.99	1.43	2.08	1.47	1.31	2.21	2.28	2.58	1.42	2.27	1.27	1.40	0.89	2.74	1.97	1.45	1.
reek 6	1.57	1.97	0.95	1.18	2.21	0.77	1.08	1.70	1.27	1.33	1.74	2.64	1.57	1.47	0.69	1.77	2.76	1.11	1.56	2.19	1.50	0.83	2.49	0.
reek 7	1.12	1.24	1.34	0.99	0.89	0.89	1.03	1.15	1.28	0.99	0.99	1.61	1.91	1.25	1.38	1.45	1.64	1.68	1.66	2.13	1.32	1.47	1.53	1.
veek 8	1.11	0.68	1.11	1.42	1.07	1.24	0.70	1.23	1.85	1.42	1.76	1.27	1.36	1.99	1.99	1.00	1.26	1.21	1.18	2.31	1.72	1.63	2.46	0.
week 9	0.94	1.16	4.22	1.05	1.04	0.98	0.68	0.62	0.78	1.60	1.50	1.72	2.12	2.78	1.33	3.08	1.85	1.55	1.43	1.42	1.59	2.20	1.52	1.
week 10	1.49	0.90	0.86	1.54	0.86	0.82	1.08	0.86	1.61	0.83	1.25	1.35	1.48	2.27	1.45	2.65	2.65	1.59	0.98	0.98	1.36	1.05	2.35	1.
reek 11	0.74	1.26	1.21	1.22	0.96	0.58	1.12	1.09	1.32	1.95	1.00	0.94	2.15	2.19	2.28	1.37	0.96	1.59	1.24	1.10	1.02	0.79	1.11	0.
veek 12	1.01	1.28	1.17	0.70	1.09	0.95	0.82	1.26	0.96	1.39	1.35	1.57	2.30	2.55	1.09	1.84	1.77	2.36	1.27	1.58	1.32	1.27	1.20	2.
week 13	1.14	0.97	1.13	1.20	1.20	1.17	1.16	0.83	0.96	1.34	1.99	1.59	1.77	1.35	1.55	1.38	2.83	1.74	1.36	1.66	1.35	1.42	0.75	1.
reek 14	2.46	1.06	1.23	0.84	1.36	1.00	0.85	1.45	1.24	1.10	2.01	1.70	1.48	1.56	1.65	0.69	2.04	1.16	1.25	1.17	1.72	1.09	0.81	1.
week 15	1.13	1.01	1.29	1.04	0.72	1.54	0.75	1.88	1.32	0.77	1.42	1.09	1.10	1.56	0.92	1.60	1.66	1.19	1.48	1.22	1.23	1.37	0.61	1.
rreek 16	1.49	0.50	1.92	1.11	1.09	1.62	0.72	1.65	1.59	1.82	2.48	1.78	1.38	1.93	2.19	1.88	1.38	1.58	1.22	1.03	1.24	0.84	0.99	1.
veek 17	1.24	1.03	1.13	1.43	1.07	0.93	0.86	1.28	1.48	1.33	1.62	1.78	1.05	1.40	1.37	1.04	1.35	1.60	1.12	0.85	0.97	0.93	1.04	1.
week 18	0.94	1.00	1.03	0.94	1.40	1.04	1.08	1.19	0.78	1.29	0.91	1.60	0.86	1.69	1.38	1.54	0.95	1.25	1.31	1.48	1.18	1.39	1.28	1.
week 19	1.45	0.79	0.69	1.00	1.60	0.76	1.14	0.88	1.52	0.92	1.30	1.14	0.87	1.30	2.18	1.50	2.14	0.84	0.98	0.67	0.99	1.11	0.92	1.
week 20	0.90	0.85	1.43	1.25	1.60	1.36	1.30	1.23	1.09	1.47	1.11	1.10	1.09	1.82	1.66	1.07	1.45	1.61	1.01	1.31	0.77	1.11	1.28	1.
veek 21	0.65	1.07	0.86	0.46	1.46	0.59	0.69	0.86	0.85	1.15	1.09	1.16	1.11	1.35	1.20	1.07	1.20	0.99	1.21	1.49	1.80	1.55	0.79	1.
reek 22	0.85	0.95	0.77	1.66	0.47	1.32	0.90	1.37	0.53	1.33	1.33	1.44	1.55	2.27	1.82	1.64	1.69	1.16	1.15	1.77	1.05	1.17	1.03	0.
veek 23	0.65	0.81	0.88	1.18	0.96	0.92	0.88	1.02	1.44	1.36	1.15	1.77	1.10	1.37	2.02	1.90	1.63	1.48	1.21	1.14	0.99	0.88	1.11	1.
veek 24	0.81	0.82	0.95	0.78	0.78	0.74	0.77	0.42	1.19	1.26	1.26	0.91	0.96	1.23	1.14	1.26	1.42	1.15	1.13	1.09	0.78	1.39	0.83	1.
week 25	1.22	0.88	0.90	0.87	1.21	1.29	0.95	0.85	0.86	1.29	0.86	1.27	1.95	2.22	1.28	1.57	0.95	1.02	1.15	0.71	0.66	1.33	0.93	0.
week 26	0.86	0.79	1.14	1.16	0.83	0.99	1.42	1.25	1.20	1.12	1.53	1.39	1.09	1.44	0.90	1.25	1.06	1.52	1.26	1.36	1.59	1.15	1.45	O.
week 27	0.85	0.94	0.63	0.69	1.40	0.79	0.29	1.16	0.93	1.05	1.02	0.87	1.08	1.19	1.20	1.86	1.24	1.40	1.07	1.06	1.20	1.38	1.36	1.
week 28	0.60	1.01	0.85	1.32	0.73	1.37	1.86	2.82	2.42	1.79	1.32	1.45	1.62	1.24	1.55	1.21	1.42	2.00	1.38	0.94	1.02	1.19	1.14	1.
week 29	0.89	0.88	1.01	0.34	0.94	0.92	1.09	0.79	0.71	1.36	1.20	1.37	1.45	1.71	1.81	1.07	1.90	1.66	0.80	1.50	1.13	0.95	0.86	1.
week 30	1.09	1.43	0.95	1.38	1.05	1.15	0.55	0.79	1.29	1.43	1.80	1.68	1.63	2.28	1.15	1.52	1.13	0.84	1.55	1.85	1.11	1.81	0.73	0.
week 31	1.92	1.10	1.08	0.92	1.23	2.13	0.95	1.36	1.12	1.35	1.23	2.20	1.61	1.02	2.46	1.73	0.68	1.16	0.95	1.43	1.22	1.44	1.92	O.
week 32	1.05	0.89	1.35	1.02	1.08	0.89	0.64	1.43	1.03	1.39	0.88	1.38	1.51	1.08	1.94	1.31	2.05	1.35	0.71	1.52	1.36	1.54	1.40	0.
week 33	0.68	1.35	1.15	1.20	1.15	1.03	0.80	1.16	1.31	1.01	1.17	1.05	1.04	1.02	1.60	1.07	1.27	1.42	1.06	1.26	0.87	0.78	1.09	O.
week 34	1.08	1.02	1.11	0.93	1.56	1.20	1.22	1.35	0.75	1.08	1.41	1.20	1.16	2.22	1.46	1.55	1.68	1.24	1.09	1.28	1.22	1.04	0.95	1.
week 35	0.77	0.87	0.81	0.74	1.08	0.66	1.57	0.98	1.30	1.51	0.94	1.59	2.18	1.26	1.85	1.63	1.25	1.31	1.37	0.98	0.88	1.87	1.13	1.
week 36	1.02	1.02	0.84	0.83	1.52	0.68	0.66	1.25	1.50	1.18	1.57	1.59	1.91	1.76	1.49	2.01	1.26	1.68	1.34	1.46	0.44	1.55	1.39	O.
week 37	1.09	1.72	0.95	0.64	L13	1.23	0.88	0.90	1.25	1.28	1.30	1.28	1.38	1.06	1.49	1.37	2.92	1.62	1.22	1.30	1.51	1.31	1.44	1.
week 38	2.28	0.55	0.87	1.27	1.27	0.69	0.97	0.83	1.00	0.72	1.90	0.99	1.07	1.23	1.13	1.28	1.05	1.03	1.36	0.91	1.39	1.10	1.05	0.
week 39	0.86	1.11	0.79	0.95	0.82	1.24	1.10	1.47	1.64	1.53	1.59	1.70	1.62	2.45	2.55	1.55	1.13	1.78	1.32	2.00	1.90	1.29	1.04	O.
week 40	1.35	0.76	1.29	0.63	2.26	0.75	0.76	1.30	1.64	1.40	1.27	1.98	2.15	1.58	1.65	1.65	2.36	1.03	1.53	2.46	1.57	1.26	1.10	1.
week 41	0.76	0.74	0.98	0.64	1.03	1.00	1.24	1.74	1.30	1.55	1.42	2.17	1.44	1.69	2.01	1.34	1.99	1.62	1.03	2.13	0.88	1.21	1.02	1.
week 40	0.53	0.77	1.12	1.18	1.18	0.84	0.97	0.89	1.17	1.52	1.12	0.87	2.05	1.41	1.45	0.88	2.14	1.55	0.94	1.33	1.44	1.46	0.92	1.
reek 43	1.50	0.82	1.52	1.63	1.59	1.05	0.71	1.24	0.94	1.32	1.52	1.91	1.72	1.71	1.19	1.55	2.25	1.53	1.44	1.15	1.21	0.46	1.16	1.
veek 44	1.94	0.85	1.38	1.76	1.99	0.96	0.50	1.16	0.92	1.84	1.29	0.98	1.25	1.78	1.94	1.34	1.40	1.31	0.86	1.71	0.97	1.53	1.81	Q.
veek 45	1.53	0.98	1.53	1.55	1.15	0.83	1.09	1.21	0.92	1.47	1.24	1.35	0.94	1.86	1.91	1.83	1.77	0.95	1.43	0.81	1.21	1.19	1.53	1.
reek 46	0.45	0.92	1.67	0.90	0.81	0.83	1.19	0.80	0.94	1.25	0.88	1.84	1.53	1.07	2.28	2.06	1.64	1.42	1.49	1.52	1.56	1.82	1.26	1.
veek 47	0.42	0.98	1.26	1.40	1.22	1.35	0.84	1.15	1.68	1.16	1.67	1.64	1.11	1.39	1.64	1.92	1.54	1.45	1.49	1.10	1.47	£ 99	1.17	Ω
veek 48	0.80	0.68	0.47	0.65	1.14	1.07	1.20	1.03	1.06	0.80	1.23	1.38	1.15	1.74	1.86	1.59	1.49	1.49	0.83	1.57	1.18	1.02	1.15	1.
reek 49	0.92	0.98	0.47	0.83	0.94	0.89	0.57	1.17	1.10	1.08	1.01	1.40	1.29	2.06	1.07	1.21	0.88	1.07	0.95	0.62	1.16	0.75	0.77	1
veek 50	1.60	0.85	0.85	0.99	0.91	1.07	0.83	1.13	1.09	1.08	2.31	2.47	2.06	1.35	1.42	1.37	1.95	1.84	1.10	1.05	1.77	0.91	1.43	1
veek 51 veek 52	0.89 0.92	1.02 1.39	1.06 1.08	0.97 1.01	1.08 0.87	1.10 1.07	3.98 0.68	1.50 0.57	0.99	1.08 1.05	1.44 1.20	1.56 1.28	1.94 1.28	1.55 1.92	1.33 1.69	1.69 1.34	1.73 1.54	1.34 1.42	1.19 1.00	1.40 1.28	1.40 1.34	1.34 1.08	1.45 1.00	1.

Appendix C-2: 2019 Calendar ADRS Data Extract Tables – Hour of Day and Day of Week

MONDAYS

						URS I ROM	WI KUNI	OF CALL			S) BY DA LDEC 20:		EEK AN	/ IK 凡形	OF DAY										
													OF D.	ΑY											
MONDAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Tot
ek1				_				_												_					
ek2 ek3	8	11 7	4	1	3 6	1	11 16	6 5	8	17 7	15 9	7	11	6 10	11 16	8 20	8 11	16 11	12 26	8 14	8	12 5	12 10	7	2
ek4	6	4	4	8	5	3	11	8	13	10	16	11	16	8	14	10	17	6	18	17	22	14	9	7	2
ek5	5	4	4	5	6	3	3	4	5	10	13	21	14	17	9	14	8	11	10	11	5	14	16	8	2
ek 6	6	5	2	3	4	5	5	7	12	14	10	11	17	17	7	20	10	18	10	13	11	11	5	3	2
ek7	7	7	2	3	4	7	5	8	10	22	12	16	24	10	10	12	14	15	14	8	15	6	6	6	2
ek8	11	6	9	7	5	2	5	9	10	18	2	8	10	7	11	14	12	8	13	11	10	8	10	2	2
eek9	4	6	8	4	5	6	4	7	8	13	12	17	19	10	15	8	12	16	16	10	14	8	10	3	2
ek 10	2	6	7	3	3	8	3	8	10	11	22	11	19	19	12	7	10	10	14	6	11	7	5	5	2
eek 11	3	4	7	3	4	5	5 7	10	10	19	6	1.3	9	15	16	11	5	8	15	3	9	18	17	6	2
eek 12 eek 13	5 6	6	8	7	3	5 3	12	6	15 11	12 16	18 5	16 14	14	17 16	17	9 13	14	11	12	14 21	14	9	12	13 10	2
eek 14	8	9	9	2	5	3	8	9	9	15	14	12	17	15	9	19	11	14	17	11	27	7	8	10	2
eek 15	5	7	8	4	1	3	6	14	5	13	22	14	11	17	14	4	8	17	18	12	16	12	9	9	2
eek 16	9	6	3	7	3	6	13	8	7	17	12	13	21	12	13	12	10	9	9	9	12	10	7	9	2
eek 17	3	3	7	4	4	9	12	10	6	19	7	11	13	18	9	21	10	14	4	13	8	12	9	7	2
eek 18	4	8	2	11	2	4	7	3	9	9	10	9	15	9	12	17	11	16	12	9	11	13	13	8	2
eek 19	4	4	4	4	4	5	5	14	4	4	15	10	15	13	11	14	7	12	19	17	9	11	7	3	2
eek 20	10	6	5	4	5	1	4	11	9	16	15	12	4	8	10	9	11	9	15	5	10	18	9	5	2
eek 21	16	8	4	5	6	7	8	7	9	11	11	15	17	7	3	10	8	16	15	8	15	10	8	7	2
eek 22. eek 23	8	11	6 4	3	5	6	6 5	8	7	9	15 25	14	29	13 12	10	6	14	18 12	20	16 11	12	20	22	3	2
eek 24	5	9	8	6	8	4	2	5	5	8	6	12	8	20	14	10	11	15	16	13	9	9	6	5	2
eek 25	4	5	7	3	5	7	8	7	6	14	9	12	8	7	9	14	8	13	10	12	19	12	11	9	2
eek 26	11	8	2	2	2	4	1	9	4	13	19	16	20	8	11	13	7	13	13	9	8	20	17	10	2
reek 27	6	11	10	7	3	6	8	6	7	14	15	9	11	16	9	10	9	8	15	9	11	5	7	6	2
eek 28	5	5	4	5	2	2	7	5	7	10	13	12	11	15	14	12	12	13	9	13	11	16	5	10	2
eek 29	13	5	8	8	5	1	8	18	6	17	13	14	14	9	10	10	11	7	13	7	15	8	9	9	2
reek 30	7	1	3	10	8	4	8	10	13	11	7	10	9	18	12	15	14	7	11	12	29	ш	11	11	2
reek 31 reek 32	5 6	3	3 4	7	3	6	16 7	3	17	7	17	8	18	12 8	11	17	18 6	13 9	16 18	10	13 9	7	13	12	1
eek 33	8	6	3	1	6	3	2	3	9	4	11	13	15	13	30	20	15	17	7	7	13	10	6	9	2
eek 34	6	2	7	8	1	5	8	2	12	14	13	13	26	11	21	18	15	15	15	7	16	13	10	10	2
eek 35	16	7	3	5	5	3	1	8	7	9	18	17	11	7	14	9	9	19	10	11	15	6	7	8	2
eek 36	4	5	3	12	2	10	8	6	8	11	12	12	12	9	9	10	10	15	10	6	5	7	8	8	2
eek 37	7	3	7	1	1	5	3	8	3	13	9	9	7	27	20	11	5	9	13	17	6	7	19	11	2
reek 38	2	5	4	2	6	1	4	8	8	8	9	13	9	16	16	10	9	13	8	3	7	11	7	4	1
reek 39	3	7	3	4	5	3	5	8	9	16	17	14	10	11	19	9	7	11	21	6	10	3	12	6	2
reek 40	9 10	3	6	9	2	3 6	3 4	3	7 6	16 14	8	10	14	14	6	9	8 11	22 4	17 19	13 8	9	8	9	4	2
eek 41 eek 42	5	5	8	5 6	5 4	4	6	12	7	12	11	19	12 8	19 15	9	9	20	11	12	111	10	15 10	8	8	2
pek 43	6	6	4	3	6	6	5	7	17	7	16	8	6	10	21	18	17	10	9	14	10	2	6	5	2
eek 44	3	6	2	4	4	3	5	5	7	11	14	6	7	11	14	21	12	10	20	16	9	6	15	5	2
reek 45	7	6	1	9	5	5	12	4	13	8	15	16	16	6	11	10	7	22	10	10	6	6	5	5	2
reek 46	1	7	1	5	3	5	6	12	8	14	20	10	10	19	10	18	19	16	12	26	6	5	10	15	2
eek47	2	5	4	3	6	3	13	7	8	12	12	8	22	11	5	9	15	4	13	11	4	14	13	4	2
reek 48	9	4	2	3	4	7	2	11	7	9	11	18	14	10	6	10	13	11	19	15	15	4	10	12	2
eek 49	1	5	7	9	4	8	10	9	15	20	15	8	12	111	11	10	7	11	21	13	10	16	16	6	2
eek 50	7	8 7	9	3	3	4	3	9	9	17	13	7	17	20	14	15	7	15	21	19	11 9	8	9	13	2
eek 51 eek 52	10	5	15 4	8 14	9	- 6 - 7	7 19	9	6	12	18 7	15 22	15 14	11	11 16	9 23	6 15	8 13	13	13	10	7 16	5	5	2
eek53	4	7	6	7	6	5	10	7	12	19	20	3	12	14	9	10	23	9	8	12	8	10	16	9	2
otal Responses (1-4)	332	303	271	275	218	211	362	400	453	661	672	622	709	664	631	669	575	639	726	590	588	518	511	376	
lax	16	11	15	14	9	10	19	18	22	22	25	22	29	27	30	23	23	22	26	26	29	20	22	15	2
leam	6.4	5.8	5.2	5.3	41.2	4.6	7.0	7.7	8.7	12.7	12.9	12.0	13.6	12.8	12.1	12.9	11.1	12.3	14L0	111.3	111.3	10.0	9.8	7.2	22
Ath Percentille Rank	10	8	8.9	9	6	7	112	111	113	17.9	18.9	16.9	19.9	18.9	16.9	20	16.8	17	19.9	16.9	15.9	16	16	11	25

TUESDAYS

											MMEDIC:														
						DISTRIB	UTION	OF CALL	•				EEK AME	HOUR	OF DAY										
									1.	IAN - 31	DEC 201														
TUESDAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
eek 1	16	16	12	6	12	5	10	7	6	21	3	9	6	7	12	13	14	5	7	9	14	19	15	11	255
eek 2	7	4	5	5	2	3	5	6	7	8	15	11	16	13	18	13	14	18	10	11	7	13	11	10	232
eek 3	12	4	5	4	1	5	3	6	11	9	6	12	15	3	15	10	11	12	9	16	9	11	9	6	204
eek 4	5	3	3	6	3	5	13	4	14	7	10	14	9	10	18	13	11	9	17	7	9	13	4	5	212
eek 5	9	5	7	3	6	6	7	1	4	13	11	11	6	10	15	12	13	6	13	8	5	20	10	7	208
eek 6	3	5	8	8	4	5	10	6	5	17	16	13	14	9	18	8	18	11	26	11	12	15	7	5	254
eek7	2	6	4	4	3	7	4	6	10	16	20	13	11	20	11	7	12	8	13	13	15	7	8	5	225
eek 8	1	5	5	6	5	7	4	7	12	8	12	14	8	11	13	3	15	14	2	14	8	9	9	5	197
eek9	9	2	2	2	2	6	4	6	9	7	11	14	15	10	9	10	9	17	9	12	8	10	4	10	197
eek 10	2	10	7	3	8	1	7	4	5	10	17	13	14	7	16	14 7	11	3	16	16	3	12	7	6	206
eek 11 eek 12	6	6	4	6	5	5	-	14 6	15	18	16 5	24	12 8	8	16	-	4 10	10 6		14	13	6 11	8	5 4	221 197
eek 13	2	3	6	5	6	3	- 6 - 5	7	16 11	10	5	6	13	12	13	13	18	9	6 14	8	10	9	5 11	8	203
eek 14	6	5	3	3	8	3	5	10	10	15	21	10	15	16	9	11	8	6	12	15	8	8	12	10	229
eek 15	8	4	7	7	9	1	8	3	9	4	22	11	17	10	8	14	16	13	9	12	12	7	12	2	225
eek 16	11	6	4	6	4	4	10	7	8	10	18	13	17	10	5	7	7	10	10	8	8	9	6	14	212
eek 17	14	5	4	3	5	3	5	11	8	12	21	12	21	20	7	20	10	13	9	9	10	17	9	8	256
eek 18	6	7	4	7	5	2	11	4	5	14	15	17	8	14	9	6	14	13	17	22	5	5	3	9	222
eek 19	5	5	6	2	3	2	4	9	9	7	17	24	18	6	11	15	18	18	13	8	9	10	11	7	237
eek 20	5	8	2	4	2	3	6	6	6	14	11	5	8	15	8	11	20	19	11	9	10	10	12	11	216
eek 21	2	5	2	5	3	3	5	5	16	15	14	11	12	17	3	13	20	13	16	13	15	10	7	5	230
eek 22	8	3	2	6	8	3	3	8	13	6	10	13	10	17	7	8	12	10	9	7	8	10	10	6	197
eek 23	2	3	1	10	3	4	3	4	5	14	15	9	7	8	9	13	10	14	13	18	10	7	9	14	205
eek 24	9	2	5	3	3	2	7	5	6	16	23	16	18	13	15 7	3	11	11	14	7	8	17	7	4	220
eek 25	5	9	1	5 11	2	3	9	6	8	22	13	21	18 15	18	12	23	14	10	13	13	7 12	11	9	6	240 259
eek 26 eek 27	5	7	7	4	2	4	8	13	13	9	15	14 18	17	16 9	9	16 8	12 8	11 20	18 10	17 8	10	14	3 14	6	229
eek 28	3	4	5	6	2	7	6	8	8	12	21	14	10	10	13	3	9	18	15	10	10	7	20	11	232
eek 29	7	3	10	7	4	5	5	6	9	11	10	13	10	18	9	4	15	11	12	17	2	5	6	4	203
eek 30	17	4	3	4	4	6	5	15	4	12	6	13	6	24	12	13	16	12	11	13	11	10	15	10	246
eek 31	9	12	7	1	4	2	6	5	14	14	16	18	8	17	10	10	16	13	17	15	9	9	8	12	252
eek 32	7	8	9	6	1	5	4	9	5	11	10	8	4	10	8	12	12	11	5	10	9	16	14	5	199
eek 33	6	5	3	2	3	3	7	7	14	13	12	8	15	18	18	9	14	16	13	15	8	10	14	12	245
reek 34	9	6	8	3	8	9	12	4	12	14	12	10	5	8	10	5	8	3	10	11	8	4	13	5	197
eek 35	11	3	4	2	3	3	5	5	3	13	12	12	14	12	8	6	12	9	18	19	5	8	10	14	211
eek 36	4	3	2	1	7	8	8	6	9	11	13	20	23	18	9	10	19	24	18	11	12	16	5	4	261
eek 37	4	7	7	3	1	4	3	5	11	14	1.3	18	14	18	11	10	17	12	13	5	12	9	17	9	237
reek 38	5	3	7	3	1	5	8	3	12	10	11	17	22	12	13	11	12	8	12	4	13	11	3	4	210
eek 39 eek 40	11 4	3	3 4	7	3	6	2 5	7	7	12 15	21 17	24 28	19 17	15 15	7 10	21 18	23	13 6	12 10	9 12	11	10	7	7	242 236
eek41	7	6	7	4	3	4	10	10	6	10	11	10	16	13	19	22	15	10	25	6	10	7	11	3	245
eck 42	4	2	1	3	2	6	9	7	12	15	9	16	6	17	15	5	16	8	21	5	11	16	23	2	231
reek 43	2	3	3	2	4	2	7	3	12	21	11	19	8	19	9	20	11	16	19	3	7	6	7	7	221
reek 44	6	2	3	6	3	10	1	13	8	12	22	12	17	6	9	14	17	14	15	14	6	7	8	13	238
eek 45	8	5	3	5	5	3	9	4	8	12	15	13	22	11	21	9	17	18	10	7	8	12	12	7	244
eek 46	14	4	5	6	3	2	5	8	5	15	17	15	15	11	16	19	16	14	11	9	16	10	6	8	250
cek 47	12	6	3	7	1	7	6	14	13	24	16	17	7	15	17	3	11	7	10	16	9	13	7	6	247
eek 48	7	3	5	6	8	8	8	11	12	14	18	12	16	10	10	11	18	16	16	20	9	8	11	10	267
eek 49	3	2	2	3	3	2	5	8	19	10	17	12	7	10	18	15	16	11	13	6	7	7	2	4	202
eek 50	8	3	5	12	3	7	6	8	13	12	8	7	12	12	9	8	8	16	12	8	16	7	14	7	221
eek 51	9	5	3	5	9	4	14	5	14	12	13	12	6	13	8	11	6	12	11	13	11	10	5	9	220
eek 52 eek 53	9	6 11	6	3	5 8	5	7	8	11 5	18	15 21	10 23	14	22 18	6 11	16 13	13	18 16	10	18	13	12	11	16 8	258 241
eek 53 otal Responses (1-4)	360	265	246	250	224	231	338	363	498	670	741	738	673	687	607	603	696	64t1	675	602	503	533	501	399	240 24U
nai kesponses (1-4) lan	17	16	12	12	12	10	14	15	19	24	23	28	23	24	21	23	23	24	26	22	16	20	23	16	267
iram	6.8	5.0	41.7	4.7	4.2	4.4	6.4	6.8	9.4	12.6	141.0	13.9	12.7	13.0	111.5	11.4	13.1	12.1	12.7	11.4	9.5	10.3	9.5	7.5	227.2
Oh Percentille Rank	11.8	8	7	7	8	7	10	11	14	17.8	21	20.8	18	18	18	18.8	18	18	18	17	13	16	14	12	2541.8

WEDNESDAYS

						NSTRIB	люн с	H F CALLS	(TRANS	SPORTS	BY DAY	OF WE	EK AND	HOUR C	OF DAY										
									•		DEC 201	9													
WEDNESDAY		_	-	-	_	_	-	_	_	_		OUR													
4 1	4	2	6	6	7	5 6	6 3	7 10	13	7	10 15	11 23	12	13	14	15 17	16 15	17	18 15	19 11	20 13	21 9	13	23 13	Tot:
k2	ш	10	3	3	4	4	9	6	6	13	15	9	23	15	12	19	16	9	13	7	16	10	7	5	24
k3	11	4	3	5	4	5	14	4	7	14	15	16	8	10	11	18	10	12	9	11	13	10	3	4	22
t4	7	9	12	4	3	9	11	8	11	13	20	15	10	7	8	7	7	16	14	13	10	7	8	2	2
:5	6	2	3	4	4	2	4	7	12	14	6	11	8	12	12	8	7	11	10	9	15	9	4	4	1
t 6 t 7	3	6	5	2	7	4 16	8	6	7	10	14	14	16	12	12	15	13	17	12	14	14	9	8	7	2
18	6	5	3	9	1	4	3	10	7	8	15	10	12	12	12	8	13	13	15	21	9	10	8	5	2
(9	5	11	7	7	3	3	3	5	7	8	17	9	13	16	7	10	11	16	10	16	ш	11	9	4	2
t 1 0	4	2	7	5	1	4	11	7	9	11	15	13	22	17	21	13	7	18	16	16	4	4	11	7	2
t 11	11	3	7	9	7		8	9	5	10	14	16	8	5	7	13	8	6	8	5	14	12	7	4	1
k12	6	4	2	6	4	6	11	13	6	11	8	11	18	11	14	9	8	4	11	4	8	13	12	10	2
k 13	10 7	7	5	6	3	7	10	5	13	4	13	12 9	13	11	15	7	13	9	9	15	14 8	9	6	5	2
k 14 k 15	6	5 11	8	5	5	3	6 5	2 5	12	14	14	13	18	13	19	9	12 5	13	12	13	16	14	6	5 6	2
k 16	5	3	3	4	4	3	10	16	12	22	19	13	9	27	9	10	6	21	7	7	9	4	7	6	2
k 17	3	7	6	2	7	5	1	6	5	12	21	20	18	12	14	8	15	11	14	12	17	10	11	6	2
k 18	7	4	11	5	3	5	2	9	8	9	10	15	22	6	9	7	14	12	6	4	5	11	8	10	2
± 19	2	4	7	4	4	6		4	5	11	10	4	14	14	19	17	8	12	18	11	9	13	12	6	2
± 20	3	12	7	4	5	4	1	3	11	16	15	9	7	9	27	25	10	5	14	13	8	8	10	5	2
±21	7	7	3	4	2	2	5	9	9	7	14	12	11	7	9	10	12	13	8	- 6	9	11	9	7	2
±22 ±23	6	5	8	2	2	6 3	6	6	11	16 14	14	20	8 14	8	17 16	28 9	13	22	10	15 6	13	5 6	8	9 7	2
124	8	4	3	1	1	7	7	6	10	14	15	9	11	21	22	18	20	12	13	11	13	6	4	6	2
k 25	5	5	2	4	3	3	7	7	6	12	11	15	8	7	10	10	12	19	11	15	12	14	7	9	2
k 26	5	7	1	5	4	5	4	10	10	3	11	11	12	11	26	17	12	11	10	15	7	7	18	14	2
k 27	9	1	8	8	6	6	14	5	11	7	14	8	8	8	16	5	8	11	14	9	11	12	11	4	2
± 28	8	11	9	3	2	6	4	10	10	10	11	20	14	5	11	10	10	22	12	22	8	8	7	9	2
± 29	6	3	4	3	10	7	4	8	3	7	15	11	7	17	12	17	12	12	14	7	11	13	10	6	2
±30 ±31	11 5	7	6 3	5 2	5 4	8 4	7	5 8	3 8	12	12 28	10	17 10	15 16	17 12	15 10	24	14 13	8	10 16	9	7	6	3 6	2
±32	5	2	3	5	2	1	6	3	9	10	15	10	14	13	4	13	8	9	8	17	4	11	9	15	1
±33	8	5	2	4	5	9	8	7	9	10	11	5	8	9	17	12	9	16	12	13	11	9	13	3	2
± 34	6	5	6		2	2	5	10	20	10	15	16	11	15	7	4	9	16	8	9	8	11	8	10	2
ek 35	3	10	5	6	4	1	2	6	5	13	8	10	12	13	6	27	22	13	8	15	20	12	4	11	2
ek 36	7	6	2	5	3	6	5	14	7	13	11	13	14	16	27	21	9	11	10	16	8	11	7	6	2
± 37	16	10	7	1	7	2	5	13	12	9	13	17	17	12	15	11	12	8	17	9	7	12	8	5	2
ek 38 ek 39	5	4	3	5	-	3 4	8	10 8	5 2	12	17	16 22	16 20	10	16 9	9	9 17	12	13	17	10 6	10 8	10 15	8 2	2
ek 40	5	3	9	4	3	2	4	7	13	10	13	15	21	13	15	15	12	13	15	10	13	12	15	12	2
±41	9	10	6	4	10	7	8	11	6	7	24	14	20	9	17	23	13	20	9	12	9	11	7	13	2
sk 42	3	6	12	4	4	7	8	10	8	15	15	16	7	13	11	24	15	10	10	9	5	11	8	7	2
±43	5		3	3		5	6	9	7	12	17	17	6	8	11	11	13	16	8	7	9	7	8	7	1
±44	7	7	7	14	4	3	5	9	8	15	14	9	7	16	13	18	9	10	15	15	14	11	7	5	2
sk45	5	4	4	4	2	13	6	8	13	8	7	15	17	11	14	11	16	13	12	15	10	12	4	14	2
生格 生47	3	7	2	6	3	3	6 3	6 11	12 8	17	17	24 13	19 24	13	6 19	8	13	7	10	27	6	10 16	6 16	15	2
±48	4	5	8	3	3	4	3	8	16	8	14	10	23	18	9	16	17	4	16	9	7	14	9	6	2
±49	9	1	4	7	7	6	3	5	10	20	18	25	10	15	9	12	14	12	15	8	11	12	10	5	2
±50	4	6	2	5	4	5	7	4	5	17	6	7	8	9	16	14	13	11	13	17	8	9	12	17	2
t 51	9	6	4	5	3	5	3	8	15	16	6	9	17	20	18	10	10	10	17	12	6	7	8	10	2
± 52	10	2	4	5	2	4	7	14	7	7	2	12	13	5	10	13	13	15	2	8	7	11	7	8	1:
±53																									
d Responses (1-4)	329	280	253	233	196	244	296	392	468	580	684	659	680	621	684	654	617	641	575	621	508	509	427	375	1
ı ım	16 GA	112 5.5	5.1	4.7	10 4.1	16 4.9	6.1	7.7	9.3	22 11L3	13.A	13.1	13.4	12.2	13.4	12.9	12.2	12.6	111.3	12.2	10.0	10.0	8.5	7.5	22
m Percentiile Rank	10	10	8	2.6	4.1	7	10.2	11	33	16	17.9	20	20.9	17	19	201.8	17	17.9	15	16.9	141	113	12.9	13	

THURSDAYS

						DISTRIB	UTION	OF CALL					EEK AN	HOUR	OF DAY										
									1.	IAM - 31	DEC 201		O F D	Δ¥											
THURSDAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	To
ek 1	5	7	2	8	4	5	9	4	5	12	12	16	11	4	11	18	8	15	ш	12	13	10	8	11	22
ek2	4	9	2	3	7	4	3	5	11	7	8	22	10	15	11	18	11	9	10	8	6	10	11	6	2
ek3	7	9	4	2	6	6	3	8	8	8	11	16	7	16	18	10	14	11	12	9	5	6	8	5	2
eek4 eek5	5	5 10	7	7	4	3 4	5	14	13	9	16	11	19 15	5 13	12 23	13	10	10	11	11	10	10	5 10	3 13	25
ents ent6	14	5	6	7	1	5	6	19	10	9	15	18	14	7	14	8	13	20	13	10	10	8	5	9	2
eek7	10	2	5	9	3	3	7	5	9	23	14	12	17	19	12	14	20	8	11	12	2	12	2	5	2
eek 8	5	3	4	1	6	8	2	10	8	16	13	7	16	8	14	19	7	5	14	13	4	8	4	3	1
eek 9	7	6	4	8	6	7	8	8	17	17	12	20	17	22	15	11	12	16	12	12	11	9	7	5	2
eek 10	6	6		4	2	3	4	1	7	10	8	10	21	14	14	8	12	11	11	10	6	6	9	6	13
eek 11	4	5	7	2	6	5	7	4	8	15	12	9	15	13	12	11	7	9	11	18	6	8	5	7	21
eek 12	3	3	4	3	3	5	14	7	5	4	9	14	10	12	7	8	6	11	10	6	14	12	17	15	21
eek 13	3	9	4	5	1	2	7	8	7	5	9	18	6	12	7	6	7	14	10	9	9	12	9	7	11
eek 14	5	4	5	3	3	7	8	8	12	13	18	15	16	17	10	16	10	12	9	12	15	16	11	11	2:
eek 15	14 8	11	3	3	3	4	7	8	17	16 11	13	11	12	13	10	10	7	8	19	6	8	11	9	5	21
eek 16 eek 17	3	4	6	3	7	4	5	- 8 - 5	8 11	8	13	14	14 9	14 7	17 9	10	14	13	13 10	7	15 7	15 9	7	6	11
eek 17 eek 18	4	8	5	3	2	10	7	8	8	9	14	10	8	8	10	19	15	11	10	14	6	6	5	5	21
eek 19	3	7	7	5	10	2	8	8	7	5	20	13	6	11	23	9	9	32	10	10	11	10	15	2	2
eek 20	4	5	8	4	9	8	4	10	14	8	11	12	16	4	15	20	10	17	16	17	10	7	11	8	2
eek 21	6	5	8	2	3	9	5	6	12	6	11	12	8	15	7	13	9	14	19	13	19	11	12	2	2
eek 22	7	3	1	7	2	4	7	2	10	11	10	10	14	14	7	14	12	6	15	14	12	19	9	7	2
eek 23	7	6	3	7	6	7	8	11	8	17	14	10	9	11	15	14	11	12	13	13	12	9	6	9	2
rek 24	3	7	7	6	6	9	2	5	15	22	13	19	17	12	18	13	8	4	9	9	8	12	14	7	24
eek 25	3	4	7	4	2	2	4	15	10	18	9	14	10	7	8	6	16	7	13	11	7	12	7	10	21
eek 26	4	4	ш	10	3	5	1	9	6	7	11	19	13	5	11	7	22	21	20	19	10	17	12	8	2
eek 27 eek 28	8	7	13 5	7	6 3	6 5	9 12	7 6	10 9	12 9	9	18 10	14	15 12	11	16 15	11	15 12	19 11	12	15 10	9	9 13	5 18	2:
eek 29	10	4	2	2	2	2	3	8	19	18	12	5	11	10	19	21	25	14	14	12	4	7	4	5	2
eek 30	7	8	4	3	1	5	4	9	6	7	9	15	11	8	6	15	13	9	9	8	15	14	11	8	21
eek 31	4	5	12	4	4	2	2	5	4	13	12	6	4	12	12	11	8	5	16	14	10	18	17	6	21
eek 32	12	7	3	4	6	1	2	6	6	12	10	12	16	25	13	4	16	7	12	9	9	11	10	3	2
eek 33	6	2	6	2	3	4	8	7	7	4	11	14	16	18	10	21	8	12	13	22	10	14	10	4	2:
eek 34	6	4	4	3	1	3	6	10	10	5	1.3	5	12	9	16	18	9	16	5	8	5	6	15	14	21
eek 35	5	7	4	4	7	3	1	5	12	15	9	13	9	16	14	11	9	14	14	12	9	6	7	3	21
eek 36	12	3	3	6	4	7	7	7	9	10	15	10	14	9	14	15	9	6	12	15	11	7	6	6	2
eek 37	14	7	4	2	3	5	4	13	13	5	15	14	11	10	10	12	23	17	22	12	16	12	9	5	25
eek 38 eek 39	5	4	5	2	4	3	6	6	13	14	17	15	10 7	24	7	4	12	16	22	15	10	11	8	1	2
eek 40	5 11	7	10 7	3	6 3	2	6 4	17 10	9	12 16	18 15	8 10	16	8 17	17	20 9	13	10	7	16 10	12 6	5	6	9	2
eek41	9	3	4	1	4	4	ш	18	24	19	11	8	12	11	17	24	8	14	6	15	23	12	12	12	2
eek 42	4	8	2	7	4	7	7	5	6	8	17	5	12	10	15	10	9	6	11	7	10	13	9	11	21
eek 43	5	5	2	5	1	7	7	4	4	16	14	22	8	19	13	15	12	10	19	7	10	5	3	6	2
eek 44	3	5	5	1	9	5	10	10	5	7	13	18	13	16	18	16	17	18	4	13	17	10	7	9	2/
eek 45	2	7	8	7	6	3	7	11	7	14	19	13	13	15	7	14	12	19	12	22	9	2	9	9	24
eek 46	5	9	6		2	5	7	9	15	24	14	14	16	16	15	7	13	17	8	8	15	8	12	3	24
eek 47	8	7	2	6	5	3	4	7	18	14	18	11	12	14	11	22	12	21	18	7	16	9	10	11	21
rek 48	3	5	3	3	2	6	8	10	8	15	13	11	16	15	14	11	17	12	12	18	7	17	11	8	2
eek 49 eek 50	6	5 1	3 4	3	5	4	8	9 5	6	12	6	9	18	12	15	12	10 7	7	18	10	8	7	5	13	2
eek 50 eek 51	9	5	5	6	3 6	3	3	6	6	18	15	12	16	14	10	16	11	12	10	11	14 7	6	3 5	8	21
sek 52	6	4	8	8	4	4	10	5	17	7	15	14	20	9	13	19	8	15	19	5	20	16	20	13	2
eek 53		-	_		_	-				<u> </u>				Ť						-					
tal Responses (1-4)	319	293	262	219	220	235	305	415	523	614	658	665	673	654	664	681	607	658	658	611	547	529	463	387	1
ax	14	11	13	10	10	10	14	19	24	24	20	22	21	25	23	24	25	32	22	22	23	19	20	18	21
ean	6.1	5.6	5.2	4.3	4.2	4.6	5.9	8.0	10.1	111.8	12.7	12.8	12.9	12.6	12.8	13.1	11.7	12.7	12.7	11.8	10.5	10.2	8.9	7.A	22
th Percentille Rank	10.9	9	8	7	7	7	9	12.8	17	18	17	18	17	17.9	17.9	19.9	17	18.9	19	17	15.9	15.9	13.9	12.9	25

FRIDAYS

						DESTRUC	N) IN M	Or Cau			-		TEK AM	, IKAM	OFDA										
									1	JAN - 31			OF D.	ΑΥ											
FRIDAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	T
ek1	7	2	5	5	5	8	12	13	11	9	14	14	14	9	24	12	12	15	12	12	11	11	11	8	- :
±k2	7	11	8	5	3	3	12	9	6	13	15	15	17	14	13	14	8	10	23	12	8	8	11	9	- :
±3	5	7	5	2	3	2	2	14	11	13	16	13	11	14	19	19	13	8	13	15	8	3	17	5	-
ek4 ek5	6	11	1	3	3 5	8	7	11	10	16	12 23	9 6	10	10 7	9	13	11	17	14	9	12 8	9 15	15 5	8	
ek6	6	10	7	6	4	7	6	6	5	7	9	6	14	10	10	111	11	16	15	24	9	14	21	16	-
ek7	4	6	13	2	1	4	3	8	13	6	11	21	13	17	20	11	15	10	9	14	5	11	12	14	
ek8	4	4	2	6	6	4	2	8	8	9	6	14	12	8	8	5	14	15	7	16	13	8	5	7	
ek9	7	7	5	7	7	6	9	12	5	15	12	10	18	14	17	11	12	14	10	18	7	10	14	13	
ek 10	4	2	6	3	3	5	4	5	12	8	17	9	7	10	16	25	ш	8	15	14	15	10	14	23	- 2
ek 11	7	3	5	3	5	5	8	12	9	6	17	16	6	17	12	27	15	7	12	8	10	11	7	9	-
ek 12 ek 13	7	2	9	3	3	4 5	7	3 11	9	13	12	9	17	14 16	12	10	9 20	15 25	7	10	7	7	7	7	1
ek 14	7	5	5	7	4	5	1	6	10	9	11	14	11	8	11	16	11	12	8	13	12	9	7	7	
ek 15	4	10	3	8	4	3	4	9	13	8	8	16	9	8	10	12	13	8	11	4	9	4	14	9	
ek 16	6	4	3	4	12	5		8	8	7	2	10	13	7	8	8	9	16	10	4	8	8	8	2	1
ek 17	8	8	15		5	4	5	6	8	10	13	18	8	5	9	8	16	10	15	6	10	8	22	3	-
ek 18	10	4	7	6	4	2	6	9	17	10	15	21	32	15	12	16	20	3	18	7	12	9	15	13	-
ek 19	3	3	4	8	4	4	2	4	21	25	12	14	12	12	13	8	9	9	12	5	12	9	5	9	- :
ek 20	8	3	2	4	5	4	6	9	ш	9	4	9	13	15	19	12	16	31	13	14	11	15	6	9	-
eek 21 eek 22	6	9	3	5	3 4	3	7	9	7	10	18	12 9	13	9 10	11	13	5 9	12	10	5 10	9	18	14	16 5	
ek 23	10	4	9	4	2	6	8	14	11	11	10	8	12	19	12	16	17	15	17	17	5	11	8	10	
ek 24	4	5		3	3	2	9	5	11	12	18	14	12	13	14	8	10	8	12	13	9	18	13	6	
ek 25	7	5	4	4	1	7	9	12	17	14	7	9	15	11	16	16	16	16	9	11	8	8	9	9	-
ek 26	11	1	6	9	6	3	2	9	13	16	5	17	7	7	15	8	13	14	11	18	16	5	16	13	- :
ek 27	3	4	5	3	2	4	9	10	13	11	14	13	11	14	9	13	27	16	12	17	14	6	8	8	
ek 28	12	8	4	4	3	2	7	11	11	12	11	13	21	15	14	12	8	4	10	5	7	16	6	10	-
eek 29 eek 30	4	3	7	3	2	4	10	7	8 4	13	19	10	15 5	24	25 13	12 17	12 5	8 20	14 5	17	12 16	7	8	9	
sex 30 sek 31	13	14	2	3	2	6	3	3	8	20	8	18	9	8	12	14	5	7	12	16	7	8	19	13	
ek 32	9	7	6	2	1	4	5	6	15	7	10	16	13	15	6	20	15	10	10	13	12	10	7	13	
ek 33	6	4	6	4	2	1	6	4	7	19	11	12	12	11	5	17	7	17	5	13	4	10	9	7	
rek 34	15	6	3	12	4	1	4	9	9	17	15	17	18	12	18	11	11	12	18	9	8	6	8	14	- 2
ek 35	8	9	3	4	3	4	3	11	10	5	10	15	14	13	14	18	11	9	11	8	12	8	9	9	- 2
eek 36	2	3	6	4	5	6	5	8	7	8	14	12	23	11	11	18	16	12	8	9	9	5	6	10	- 2
ek 37	9	5	4	4	3	3	10	8	2	14	8	14	5	21	11	14	15	16	10	13	2	8	8	15	-
eek 38 eek 39	7 2	6	2	5	5 1	5 1	3	7	7	14	5 20	16 3	17	15	13 15	15	15	16 14	6 14	5 15	19	14	14	14 8	
eek 40	7	8	3	5	3	7	5	5	13	13	5	17	13	13	7	11	9	20	11	10	12	7	10	5	
eek 41	11	6	9	3	5	7	6	12	13	5	22	17	16	17	11	12	17	17	15	29	10	13	14	8	
rek 42	9	4	4	9	4	6	5	2	9	9	14	5	18	17	10	15	13	24	7	19	16	23	8	5	
rek 43	7	5	6	2	3	2	7	4	10	11	12	22	12	10	17	5	11	16	9	12	10	8	7	15	- 2
ek44	9	14	9	11	14	6	7	1	11	10	9	8	9	11	12	8	11	16	12	8	12	6	13	8	2
eek45	8	8	7	2	7	1	5	7	6	10	10	10	16	16	15	11	16	15	15	24	10	8	8	8	-
eek 46	5	8	6	6	4	2	3	7	15	17	13	8	7	9	12	19	12	19	18	8	10	15	11	8	-
eek 47 eek 48	8	1	7	3	1	2	5	8	11 6	15	9	13	23 12	10 14	10 15	15 14	14 7	11	8 12	14	15 7	4	9	7	-
ek49	5	8	8	8	6	5	6	12	12	7	12	11	7	9	13	10	9	10	9	7	10	9	11	7	
ek 50	9	4	2	6	4	7	6	9	15	26	16	11	14	12	10	11	15	18	12	12	18	12	12	6	
ek 51	5	11	4	2	4	5	13	10	10	14	10	21	7	15	17	13	10	13	25	7	9	11	8	12	:
ek 52	7	6	8	7	5	8	2	6	10	8	17	9	20	18	8	15	9	15	12	13	7	9	10	9	:
ek 53																									
tal Responses (1-4)	353	305	265	250	212	223	292	423	531	589	627	660	681	653	678	693	643	706	628	628	529	523	552	486	
DK .	15	14	15	112	14	8	13	14	21	26	23	22	32	24	25	27	27	31	25	29	19	23	22	23	-
eam	6.8	10.9	5.3 g	4L9 8	4.1	7	5.7 9	12	10.2	11L3 16.9	12.1	17.9	13.1	12.6	13.0	13.3	12.A 16	18.9	17.9	17.9	10.2	10.1	10.6	9.3	2

SATURDAYS

						DESTRU	NOTION					SERVIC VY OF W		D HOUR	OF DAY	r									
							,,,,,,,,		•		1 DEC 20														
SATURDAY											н	OUR	OF D.	ΑY											
SATURDAT	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Tota
reek1	7	9	10	6	3	6	7	13	2	9	13	12	14	12	8	10	8	15	14	5	9	10	8	10	221
eek2	9	5	4	8	6	4	12	6	9	6	12	4	7	12	9	9	6	9	4	6	8	6	13	8	18.
eek3	5	14	4	10	5	3	7	5	9	18	6	9	14	8	14	8	9	7	9	11	8	13	8	5	21
eek4 eek5	5	10	5 13	3	3 14	8	5	8	8	10 5	10 8	6	15	16 16	16 6	5 9	11	7	25	5	14 15	12 9	9	5 12	19. 23.
reek 6	6	7	10	11	8	8	7	4	7	10	6	6	17	8	15	14	7	12	10	11	5	3	3	5	20
reek 7	2	11	13	9	6	6	7	4	9	5	5	8	11	20	10	19	12	17	10	8	14	3	10	11	23
reek 8	8	6	3	9	7	5	11	8	7	6	6	11	9	13	9	12	8	10	2	7	10	8	8	5	18
eek 9	6	12	4	8	4	6	6	9	8	8	14	11	16	16	10	13	12	15	12	6	6	10	13	5	23
reek 10	7	6	6	6	7	3	5	5	11	11	12	14	13	11	16	10	10	12	19	10	16	6	15	15	24
eek 11	8	3	3	7	3	4	5	10	6	8	14	8	7	8	8	19	8	11	8	12	9	8	14	8	19
eek 12	12	10	11	2	5	5	3	8	4	4	6	10	8	10	12	9	7	12	15	15	9	15	12	6	21
eek 13	7	10	6	9	5	5	4	10	7	6	7	13	13	6	10	9	13	11	9	25	14	7	15	10	23
reek 14	15	16	3	1	3	4	2	9	10	10	12	12	25	8	18	7	11	16	10	10	16	11	8	6	24
reek 15	7	7	6	6	5	5	13	6	9	2	14	13	14	16	5	8	9	9	20	9	10	17	7	12	22
reek 16	5	3	8	4	4	5	8	12	13	6	8	13	4	7	8	18	9	17	13	16	9	13	2	5	21
reek 17	5	6	9	6	3	3	4	5	13	4	9	13	18	12	9	8	16	6	7	13	6	12	7	12 5	20
eek 18 eek 19	5 8	11	7	5	6	3	10 5	7	12 9	7	9 15	13	13	20 17	14 15	6 8	20 15	19	8	10	7	9	7	13	21
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Oh Pencentiile Rank	13.9	112	12.9	10.9	7	7	10.1	11.9	12.9	13.9	14	15.8	18	19.9	16	16	16	17	18.9	17.9	16	15.9	141.9	12	249

SUNDAYS

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veek 10	7	10	5	12	5	4	9	6	5	9	5	10	10	10	7	1.3	11	13	15	13	10	11	10	6	216
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Appendix C-3: Statistical Calculations Response Volumes Mondays in 2019

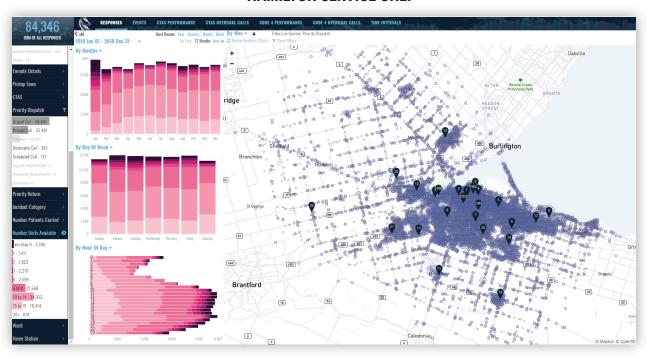
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Appendix C-4: Maximum Experienced Demand Heat Map Day of Week, Year and Hour of Day – Fiscal Years 2013 through 2020

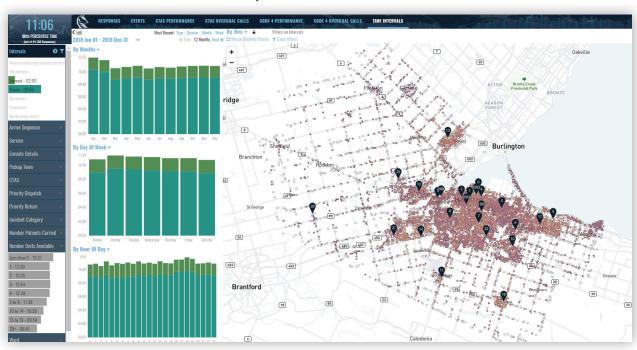
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sectors 13 12 9 9 10 13 12 14 24 17 25 22 23 22 24 19 27 20 21 23 19 24 20 15 celebractors 20 17 15 16 10 10 17 14 18 18 12 21 20 24 26 23 22 22 23 24 31 26 23 27 19 19 17 21 arrators 18 15 10 12 10 12 21 15 30 22 24 26 23 22 22 23 24 31 26 23 27 19 19 17 21 arrators 14 10 14 11 12 16 15 19 18 22 26 24 23 20 26 22 23 24 31 26 24 20 19 22 17 ators 14 10 14 11 12 16 15 19 18 22 26 24 23 20 26 22 23 24 26 22 25 24 26 27 27 29 21 19 15 ators 13 18 18 12 18 11 10 12 13 19 23 21 18 20 20 19 23 22 29 21 30 22 21 23 16 22 21 23 16	idays turtudys indispiration of the control of the	16 s by Hour o 100-01 12 13 14 15 15 15 15 15 15 17 20 100-01 15 15 15 15 15 15 15 15 15 15 15 15 15	19 10 Day 11 Day	16 17 17 17 18 18 12 19 19 18 18 12 15 16 16 16 16 16 16 16 16 17 17 18 18 12 15 16 16 17 17 18 17 18 17 18 17 18 18 17 18 18 17 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	15 10 10 11 11 12 12 13 10 11 11 18 14 14 15 10 10 11 11 12 17 14 10 11 11 12	13 10 10 11 12 11 12 11 12 13 13 14 15 16 17 8 17 8 18 19 9 9 10 11 11 12 11 10 10 10 10 10 10 10 10 10	11 11 11 11 11 11 11 11 11 11 11 11 11	14 18 18 16 17 17 16 16 17 17 16 16 17 17 16 17 17 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	13 16 17-08 17 18 18 15 16 19 19 14 14 14 15 15 16 16	14 17 17 18 19 19 19 18 19 19 16 16 18 19 16 16 18 19 16 16 18 18 19 19 16 16 18 19 19 16 17 19 17 19 17 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19	18 21 21 21 22 24 22 24 22 24 22 24 25 18 19	18 10-11 22 25 26 23 18 10-11 10-11 22 23 28 28 22 24 25 24 25 24 25 24 25	20 22 21 11-12 22 24 35 26 62 21 23 25 25 22 21 21 15 15	20 21 24 24 22 22 22 22 24 27 27 27 27 20 20 21 27 27 20 20 21 27 27 20 20 20 21 21 22 22 21 27 20 20 20 20 20 20 20 20 20 20 20 20 20	18 19 19 19 19 21 20 20 24 24 26 22 24 25 26 22 24 26 27 27 27 25 24 26 22 24 26 27 27 27 27 27 27 27 26 26 27 27 27 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	21 21 21 21 21 22 24 24 20 24 25 25 23 24	21 15-16 21 29 25 20 24 22 29 20 20 20 20 20 20 20 20 20 20	21 18 16-17 22 23 24 24 18 16-17 20 21 16-17 22 25 16 16 16 16 23 23 24 24 25 25 24 24 24 24 24 25 25 24 25 25 26 24 26 26 27 20 24	21 21 21 26 21 20 30 21 20 34 22 20 34 24 22 22 23 18 24 22 23 23 23 24 22 23 23 24 25 26 27 27 28 29 29 20 20 20 21 21 21 22 23 24 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	23 22 22 25 26 26 20 24 20 23 19 18 19 21 20 20 19 21 21 20 21 21 21 22 23 23 24 24 25 26 26 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	26 19-20 20 24 25 25 26 24 19 17-20 27 26 27 27 29 27 29 20 21 21 21 22 21 23 24 24 25 26 27 27 28 29 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	20 24 18 19 19 22 20 20 20 16 16 18 20 15 29 16 20 23 19 23 19	17. 28 21.22 24 22 21 15 16 19 19 18 18 16 20 19 20 20 20 20 20 16 19 19 17 25 25	18 17 23 27 28 29 29 29 29 29 20 16 20 20 20 20 20 20 20 20 20 20 20 20 20
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	indays interlays andays	16 by Noor of 00-01 12 3 13 15 15 15 15 15 15 15 15 15 15 15 15 15	19 19 101-02 101	16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	15 10 15 10 15 10 15 10 15 10 11 11 11 11 11 11 15 10 8 11 11 12 11 12 11 14 10 12 11 14 10 11 11 11 11 11 11 11 11 11 11 11 11	13 10 11 11 12 11 12 11 12 11 12 11 10 14 15 16 17 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	11 11 11 12 13 10 10 11 15 16 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	14 18 18 16-07 17 16 15 12 12 17 16 16 17 17 16 17 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	13 16 17 48 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	18 19 19 18 21 19 16 16 18 19 19 16 16 18 19 19 16 16 18 19 16 18 19 17 19 16 17 19 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	18 21 21 21 22 24 22 25 24 25 24 25 27 21 18 22 24 26 26 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	18 10-11 22 25 25 20 18 10-11 25 22 22 24 25 20 24 25 20 22 24 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	20 22 22 22 24 35 26 21 23 25 22 21 21 21 25 22 21 21 21 25 21 21 21 21 21 22 22 24 24 26 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	20 21 24 22 22 22 22 24 22 21 27 27 20 22 24 27 27 20 23 22 24 27 27 20 23 22 24 22 21 27 27 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	18 19 19 21 19 22 1 20 24 24 27 22 24 24 26 22 24 24 24 26 22 24 24 27 25 24 24 27 27 27 27 27 27 27 27 27 27 27 27 27	21 21 21 21 21 21 21 21 22 26 21 20 26 26 27 23 24 20 26 27 23 24 20 27 23 24 20 26 27 27 23 24 20 27 28 29 20 20 20 20 20 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20	21 25-16 21 29 25 20 24 22 29 29 20 20 21 20 20 21 20 20 21 21 20 20 21 21 22 23 24 24 25 26 27 20 20 20 20 20 20 20 20 20 20	21 18 16-17 22 23 24 24 18 16-17 20 21 25 16 16 16 16 16 16 16 16 16 16 17 24 24 24 24 24 26 26 26	21 21 22 26 21 27 18 26 27 27 28 27 29 27 29 27 29 27 29 29 29 29 29 29 29 29 29 29 29 29 29	23 22 22 23 24 26 26 26 26 27 26 27 27 27 27 27 28 27 27 28 27 27 27 27 27 27 27 27 27 27 27 27 27	26 27 28 29 29 24 29 29 29 20 24 19 19 19 20 21 21 22 21 22 21 22 21 23 24 19 22 21 25 26 26 27 27 28 29 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	20.71 20.71 24 18 19 19 29 20 20 20 16 16 20 16 20 16 20 16 20 17 20 16 20 17 20 18 20 19 19 20 21 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20	17 28 28 24 22 24 19 22 11 16 16 19 20 16 19 22 21 17 22 20 16 19 20 20 16 20 20 16 20 20 17 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	18 22-23 17 17 14 16 16 18 21 19 16 15 14 12 20 21 18 18 22 22 22 21 21 15 12 15 15 16 16 17 17 18 18 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10
	days Intradys Indays In	16 bs by Hoor or 1 12 20 18 by Hoor or 1 22 21 33 25 by Hoor or 2 20 20 18 34 44 45 45 45 45 45 45 45 45 45 45 45 45	19 19 10 10 11 11 17 11 17 18 24 22 10 10 10 12 11 11 17 18 18 24 19 10 10 10 11 11 11 11 11 11 11 11 11 11	16 17 17 18 15 11 12 19 18 18 12 18 17 15 15 16 16 17 15 15 16 17 17 17 18 17 17 17 17 17 17 17 17 17 17 17 17 17	15 10 10 11 11 12 13 10 11 11 11 11 11 11 15 10 10 10 11 11 11 11 11 11 11 11 11 11	13 10 11 11 12 11 12 11 12 11 12 11 10 14 15 16 17 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	11 11 11 12 13 10 10 11 15 16 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	14 18 18 17 17 16 17 17 16 17 17 16 17 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	13 16 17 18 17 16 17 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18	18	18 21 21 22 24 22 24 27 28 24 26 18 19 22 24 26 18 19 25 25 25 25 25 26 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	18 10-11 22 25 20 23 3 18 10-11 16 11 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 22 22 22 24 24 35 26 21 23 25 22 21 21 15 15 11-12 22 22 22 22 22 23 23 21 21 21 21 22 21 23 24 24 25 26 26 27 27 27 28 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29	20 21 24 21 22 22 22 22 24 22 21 11 25 20 22 22 21 27 27 27 20 20 21 22 22 22 24 27 27 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	18 19 19 19 19 19 19 19 19 19 19 19 19 19	21 21 21 21 22 24 24 20 26 25 23 24 25 25 23 24 28 29 29 29 29 29 29 29 29 29 29 29 29 29	21 15-16 21 29 25 20 24 22 29 29 15-16 19 20 20 21 19 20 20 21 19 20 21 19 20 21 21 21 22 23 24 25 27 29 20 20 21 21 21 21 22 23 24 25 26 27 27 28 29 20 20 20 20 20 20 20 20 20 20	21 18 16-17 22 23 24 24 18 16-17 20 21 25 16 16 16 16 16 16 16 16 16 16 17 24 24 24 24 24 26 26 26	21 21 22 26 22 22 22 22 23 22 24 22 22 22 22 22 22 22 22 22 22 22	23 22 22 23 24 26 26 26 26 27 26 27 27 27 27 27 28 27 27 28 27 27 27 27 27 27 27 27 27 27 27 27 27	26 19 20 22 24 19 20 17 15 20 26 22 27 22 25 18 23 29 25 19 20 20 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	20 21 22 22 20 20 26 21 26 21 27 29 26 21 29 29 29 29 29 29 29 29 29 29 29 29 29	17 28 21 32 24 22 21 19 22 21 13 19 19 28 16 16 20 19 17 22 20 20 20 20 20 21 17 25 21 17 25 21 19 20 21 19 20 20 20 20 20 20 20 20 20 20 20 20 20	18 17 23 17 23 17 17 14 16 16 17 17 18 18 19 19 19 16 15 14 20 16 16 17 17 18 18 20 17 17 18 18 20 18 18 20 22 23 18 20 22 21 21 21 21 17 15 18

Appendix C-5: Darkhorse Analytics Vehicle Availability and Emergency Call Response Time – Time of Day and Day of Week 2018-2020

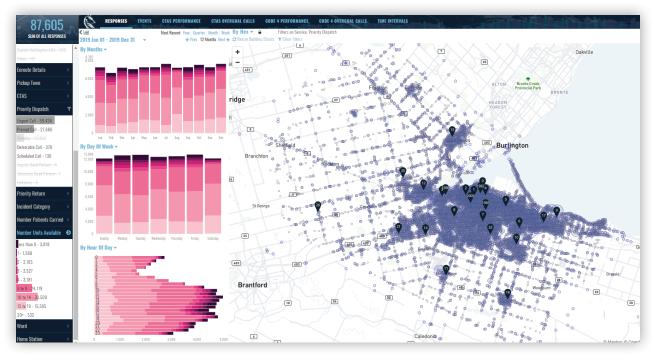
2018 - RESPONSES PRIORITY 1 TO 4 - HOUR OF DAY, DAY OF WEEK, MONTH - HAMILTON SERVICE ONLY



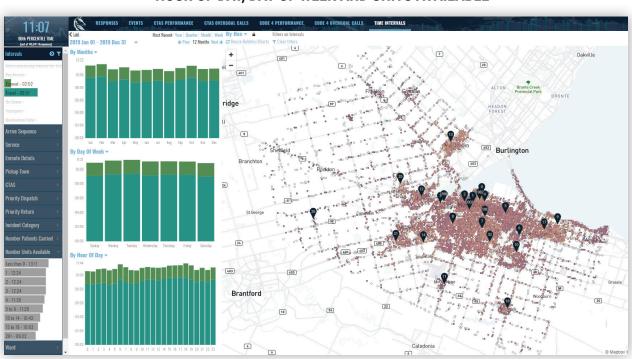
2018 - RESPONSE TIME PERFORMANCE - URGENT ONLY - T2-T4 ONLY - BY HOUR OF DAY, DAY OF WEEK AND UNITS AVAILABLE



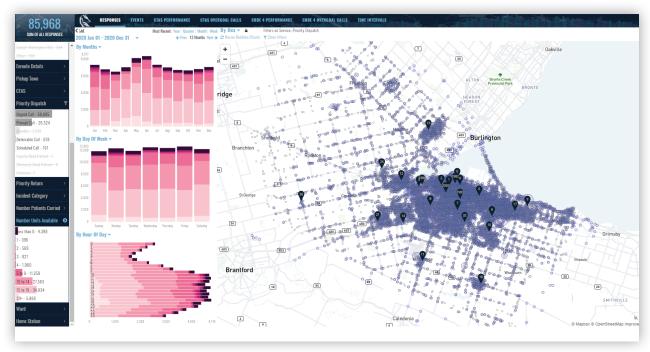
2019 - RESPONSES PRIORITY 1 TO 4 - HOUR OF DAY, DAY OF WEEK, MONTH - HAMILTON SERVICE ONLY



2019 - RESPONSE TIME PERFORMANCE - URGENT ONLY - T2-T4 ONLY - HOUR OF DAY, DAY OF WEEK AND UNITS AVAILABLE



2020 - RESPONSES PRIORITY 1 TO 4 - HOUR OF DAY, DAY OF WEEK, MONTH - HAMILTON SERVICE ONLY



2020 - RESPONSE TIME PERFORMANCE - URGENT ONLY - T2-T4 ONLY - HOUR OF DAY, DAY OF WEEK AND UNITS AVAILABLE



Appendix C-6: 90th and 95th Percentile Experienced Response Demand Heat Map Fiscal Years 2013 through 2020

90th Percentile	by Hour	of Day																						
2013 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-2
Mondays	8	7	7	6.6	6	6	8	9	13	17.3	16	16.3	13	14.3	14	15	13	11.3	13.3	12	11.4	11.5	13.4	8
Tuesdays	8.4	7	7	5	6.3	6	6	8.3	11	13.3	13	15	13	15	15	13.4	13	15.2	12	13	11.2	14	11.4	8
Wednesdays	8	6	7.2	6.5	6	5.3	7	9.2	11	14 12	16.2	15	15.2	15.2	15.2	14	13.2	14	13 13	14 12	11	11	11	9
Thursdays Fridays	7 8	7	7.3	7.5	6 5	6.4 5	7.4	8	11.4	14	16 14.2	14.2 14	16 16	15 15.2	16 15	14.6 15	16 12	14 15	12.2	13.2	13 13.2	12	10 11	9.2
Saturdays	10	11	11	7.5	6	5.2	7.4	9	8	13	12.2	14.6	14.4	13.2	13.2	13	12	14	13	12	14	15	10.2	13
Sundays	10.3	10	9	9.5	7	5.7	6.3	8.3	8.3	13.3	11	13	13	13.2	14	12	13	13	12.6	13.3	12	11.3	10.5	9
ou racy s	20.0	10		3.0	,	017	0.0	010	0.0	2010		10	10	20				10	22.10	2010		11.0	2010	
90th Percentile	by Hour	of Day																						
2014 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-2
Mondays	8	7	8	6	6	6.2	8.1	9	13	15	16.9	16	14.9	16	15	16	15	15	14.1	13.9	13.9	13	13	9.9
Tuesdays	9.1	6	8	6	6.1	5.2	10	11	11	12.9	15	14	16	15	15.8	14.9	13.9	14	14	12.9	13.9	11	11	8
Wednesdays	7.8	8.2	7.2	7.3	7	7	8.9	10.8	14	16.9	15.8	16.8	14.8	12.8	14	14.8	16	14.8	15	14.8	13.8	11	11.8	9
Thursdays	7	7	7	6	6	6	8	10.9	12	13	16	15	15	14	14	14	14	15	13.9	15	13	12	12	10
Fridays	9.1	7	7.2	6	5	5	8	9	10.9	15	15	16.9	14.9	15	16.8	16.9	15	16	13.9	15.9	11	12.9	12.9	11.9
Saturdays	11	10	11.9	7	7	6	9.1	8	9	11	13	13.9	13	15.9	14.9	14	13	12	14	14.9	13	14.9	13	10.9
Sundays	10.9	10.9	11.1	8	6	6	8	8	11.9	11	14	13.9	14.9	17.9	14	13.8	12.9	14	14.9	11	12	13.8	13.9	9.9
90th Percentile		_	02.02	03.04	04.05	or or	06.07	07.00	00.00	00.10	10.11	11 12	12.12	13.14	14 15	15 16	16.17	17.10	10.10	10.20	20.21	24 22	22 22	22.2
2015 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-2
Mondays Tuocdoor	8.3	7.6	7 8	6	5.7 6.3	6 6.5	9	10.3	12.3 11.3	17 15	19 15	19 15	18 15.3	17.3 16	15 19.2	20.3	16.3 17.3	15.3 13.3	16.3 15.3	13 13	14 11.3	12.3 15	11	9.5
Tuesdays Wednesdays	9	7.6	6	6	5.5	5.5	9.4	10.3	11.3	16.3	17.3	17	15.3	15.3	15.2	15.3	14.3	15.3	15.3	14.3	15.3	12.3	10.3	9.5
Thursdays	9	6	6.4	5	5.7	6	9.4	9	14.2	15.2	16.2	17.2	16	17.6	16	15.3	13.4	15.3	16	15	15.3	14	10.3	8.2
Fridays	9	7.2	7	8	6	6.2	8	10.2	13.2	15.2	15	17.2	18.2	17.0	15.2	15	15.2	17	16.2	14	13.2	13	14	10.4
Saturdays	11.2	11.3	9	8	7	7	8	7	11	12.2	15	15.2	15.2	15	12.4	14	14.6	16	14.2	16	14	15.2	13	11
Sundays	9	12	9	8	7	6	8	10	9.3	11	12.3	13.3	15.3	17.3	16	12	14.3	14	16.3	14.3	15.3	12.6	10.6	10.8
			_			-																		
90th Percentile	by Hour	of Day																						
2016 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-2-
Mondays	9.4	7.4	7	6.4	6	7.4	10	10.6	14.3	15	16	18	18.3	17.3	17	16	17.3	18	16.3	16	15	13	12.6	11
Tuesdays	10	8.4	7	7	6	6	8	10.3	13	14.3	16.3	16	17.3	14.6	15	17	16.6	17.6	16.3	15.3	15	12.3	13	12
Wednesdays	9	8	6.3	6.3	8	5.8	11	10.4	13.3	15.3	14	17	17.3	15.3	16.3	16	16	16	14.4	15	14.4	15	12	12.4
Thursdays	8	9.4	8	7	6	6	9	11	12.3	13.3	17	15.3	17.3	15	15.3	16	17.3	18.3	17	14	14	12	12	10.3
Fridays	9.2	8.4	8	7	7	7	8	12.3	11.2	13.4	14.4	15.2	17	17.2	15	18.4	14.2	17	17	14.2	14	14.2	13	13
Saturdays	11	10	10	8	7.3	8	9	9	11.2	13	14	13	17	15	15	16.2	14	15	16	16.2	14	15.2	14.2	14
Sundays	13.3	11	11	8.5	7	7.4	10	10.3	11.3	13.3	15	15	15	15	14.3	14	13.3	15	15.3	14	12.3	15	12.3	12
		_																						
90th Percentile	00-01		00.00			nr nr	05.07	07.00		nn 40			40.40						40.40	40.00	20-21	~ ~	~~ ~~	~~ ~
2017 Calendar Mondays	10	01-02 9	10.9	03-04 8.9	04-05 6	05-06 7.9	06-07 10	07-08 12	08-09 14.9	09-10 17	10-11 17.9	11-12 18	12-13 15	13-14 17	14-15 16	15-16 17.9	16-17 18	17-18 16.8	18-19 17	19-20 15	16.8	21-22 13	22-23 11.9	23-2
Tuesdays	9.2	8	8	8.2	7	7.3	12	10	11.4	16.2	18	18.2	17	17.2	18	20.2	18.2	16	16.2	16	15	15	13	10.2
Wednesdays	9	6	7.2	7.2	7.2	8	11	11	13.2	15.2	17.6	18.2	18	19.2	18.2	17.6	18.2	17.2	19	19	16	15	11.2	11
Thursdays	11	8.2	8.2	8.2	6.2	7	11	10.2	13	17	17.2	19	16.4	18.2	17.2	17	15.2	17.2	17.2	17	14.2	13	12	14
Fridays	11	9.2	8.2	7	6.2	8	9	12	14	16.2	18.2	19	16	16	17	17.2	17.4	17	17.4		17	18	15.2	13.2
Saturdays	12	11.2	11	9.2	7.2	8	9.2	8.2												17.2				12.2
Sundays	12								14	13	14.2	16.2	16	16.2	18	15	15.2	17	17.2	17.2	16	13	12.2	
		12.2	9.4	9	7.2	7	10	9	13.2	13 14					18 15	15 17	15.2 16	17 16.2					12.2	10.2
		12.2		9	7.2	7	10				14.2	16.2	16	16.2					17.2	16	16	13		10.2
90th Percentile	by Hour			9	7.2	7	10				14.2	16.2	16	16.2					17.2	16	16	13		10.2
90th Percentile 2018 Calendar	by Hour			9	7.2 04-05	7	10 06-07				14.2	16.2	16	16.2					17.2	16	16	13		
	_	of Day	9.4					9	13.2	14	14.2 14	16.2 16	16 15.2	16.2 17	15	17	16	16.2	17.2 17	16 17	16 15.2	13 14	14	
2018 Calendar Mondays Tuesdays	10.8 10	of Day 01-02 7 7.9	9.4 02-03 8 9	03-04 7.9 9	04-05 7.9 7	05-06 7 7	06-07 9 11	9 07-08 11.9 13	08-09 14 13.9	09-10 16 15.9	14.2 14 10-11 18 15.9	16.2 16 11-12 19.8 20	16 15.2 12-13 17 17.8	16.2 17 13-14 18 18	15 14-15 15 20.7	17 15-16 18.8 18.9	16 16-17 17.8 17	16.2 17-18 16 16.9	17.2 17 18-19 18 16.9	16 17 19-20 15.8 19.8	16 15.2 20-21 16.8 17	13 14 21-22 15 16	14 22-23 13 13.9	23-2 13 11
2018 Calendar Mondays Tuesdays Wednesdays	10.8 10 10	of Day 01-02 7 7.9	9.4 02-03 8 9 7	03-04 7.9 9	04-05 7.9 7 7.2	05-06 7 7 7	9 11 9	9 07-08 11.9 13 11.9	08-09 14 13.9 15	14 09-10 16 15.9 16.9	14.2 14 10-11 18 15.9 19.9	16.2 16 11-12 19.8 20 17	16 15.2 12-13 17 17.8 16.9	16.2 17 13-14 18 18 18.9	15 14-15 15 20.7 16.9	17 15-16 18.8 18.9 17.9	16-17 17.8 17 16.9	16.2 17-18 16 16.9 15	17.2 17 18-19 18 16.9 19	16 17 19-20 15.8 19.8 18.8	16 15.2 20-21 16.8 17 16	13 14 21-22 15 16 14	14 22-23 13 13.9 13	23-2 13 11 11
2018 Calendar Mondays Tuesdays Wednesdays Thursdays	10.8 10 10 9	of Day 01-02 7 7.9 10	9.4 02-03 8 9 7	03-04 7.9 9 7	04-05 7.9 7 7.2 8	05-06 7 7 7 8.9	06-07 9 11 9	9 07-08 11.9 13 11.9	08-09 14 13.9 15	14 09-10 16 15.9 16.9	14.2 14 10-11 18 15.9 19.9 23	16.2 16 11-12 19.8 20 17 17.9	16 15.2 12-13 17 17.8 16.9 20.9	16.2 17 13-14 18 18 18.9 19	15 14-15 15 20.7 16.9 17.9	17 15-16 18.8 18.9 17.9	16-17 17.8 17 16.9	16.2 17-18 16 16.9 15 17.9	17.2 17 18-19 18 16.9 19 20	16 17 19-20 15.8 19.8 18.8 15.9	16 15.2 20-21 16.8 17 16 15	13 14 21-22 15 16 14 15	22-23 13 13.9 13 14.9	23-2 13 11 11 10
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays	10.8 10 10 9	of Day 01-02 7 7.9 10 10	9.4 02-03 8 9 7 7	03-04 7.9 9 7 8	04-05 7.9 7 7.2 8	05-06 7 7 7 8.9 8	06-07 9 11 9 9	9 07-08 11.9 13 11.9 11	13.2 08-09 14 13.9 15 12 12.9	14 09-10 16 15.9 16.9 16	14.2 14 10-11 18 15.9 19.9 23 15	16.2 16 11-12 19.8 20 17 17.9	16 15.2 12-13 17 17.8 16.9 20.9	16.2 17 13-14 18 18 18.9 19	15 14-15 15 20.7 16.9 17.9	15-16 18.8 18.9 17.9 15 18	16-17 17.8 17 16.9 17	16.2 17-18 16 16.9 15 17.9 20.9	17.2 17 18-19 18 16.9 19 20 19	16 17 19-20 15.8 19.8 18.8 15.9	16 15.2 20-21 16.8 17 16 15 16.9	13 14 21-22 15 16 14 15 17	14 22-23 13 13.9 13 14.9 15	23-2 13 11 11 10 12.9
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays	10.8 10 10 9 10 11.9	7 7,9 10 10 8 10	9.4 02-03 8 9 7 7 9	03-04 7.9 9 7 8 7 8.9	04-05 7.9 7 7.2 8 7 8.1	05-06 7 7 7 8.9 8 7.2	9 11 9 9 10 10	9 07-08 11.9 13 11.9 11 10	13.2 08-09 14 13.9 15 12 12.9	14 09-10 16 15.9 16.9 16 16 13	14.2 14 10-11 18 15.9 19.9 23 15 14.9	16.2 16 11-12 19.8 20 17 17.9 17.9	16 15.2 12-13 17 17.8 16.9 20.9 17	16.2 17 13-14 18 18 18.9 19 19	15 14-15 15 20.7 16.9 17.9 18 16.8	15-16 18.8 18.9 17.9 15 18	16-17 17.8 17 16.9 17 18 15.9	16.2 17-18 16 16.9 15 17.9 20.9 16.9	17.2 17 18-19 18 16.9 19 20 19	16 17 19-20 15.8 19.8 18.8 15.9 19	16 15.2 20-21 16.8 17 16 15 16.9	13 14 21-22 15 16 14 15 17 14.9	22-23 13 13.9 13.9 15 15.8	23-2 13 11 11 10 12.5 13
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays	10.8 10 10 9	of Day 01-02 7 7.9 10 10	9.4 02-03 8 9 7 7	03-04 7.9 9 7 8	04-05 7.9 7 7.2 8	05-06 7 7 7 8.9 8	06-07 9 11 9 9	9 07-08 11.9 13 11.9 11	13.2 08-09 14 13.9 15 12 12.9	14 09-10 16 15.9 16.9 16	14.2 14 10-11 18 15.9 19.9 23 15	16.2 16 11-12 19.8 20 17 17.9	16 15.2 12-13 17 17.8 16.9 20.9	16.2 17 13-14 18 18 18.9 19	15 14-15 15 20.7 16.9 17.9	15-16 18.8 18.9 17.9 15 18	16-17 17.8 17 16.9 17	16.2 17-18 16 16.9 15 17.9 20.9	17.2 17 18-19 18 16.9 19 20 19	16 17 19-20 15.8 19.8 18.8 15.9	16 15.2 20-21 16.8 17 16 15 16.9	13 14 21-22 15 16 14 15 17	14 22-23 13 13.9 13 14.9 15	23-2- 13 11 11 10 12.9
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays	00-01 10.8 10 10 9 10 11.9	0f Day 01-02 7 7.9 10 10 10 8 10	9.4 02-03 8 9 7 7 9	03-04 7.9 9 7 8 7 8.9	04-05 7.9 7 7.2 8 7 8.1	05-06 7 7 7 8.9 8 7.2	9 11 9 9 10 10	9 07-08 11.9 13 11.9 11 10	13.2 08-09 14 13.9 15 12 12.9	14 09-10 16 15.9 16.9 16 16 13	14.2 14 10-11 18 15.9 19.9 23 15 14.9	16.2 16 11-12 19.8 20 17 17.9 17.9	16 15.2 12-13 17 17.8 16.9 20.9 17	16.2 17 13-14 18 18 18.9 19 19	15 14-15 15 20.7 16.9 17.9 18 16.8	15-16 18.8 18.9 17.9 15 18	16-17 17.8 17 16.9 17 18 15.9	16.2 17-18 16 16.9 15 17.9 20.9 16.9	17.2 17 18-19 18 16.9 19 20 19	16 17 19-20 15.8 19.8 18.8 15.9 19	16 15.2 20-21 16.8 17 16 15 16.9	13 14 21-22 15 16 14 15 17 14.9	22-23 13 13.9 13.9 15 15.8	11 11 10 12.9
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays	00-61 10.8 10 10 9 10 11.9 13	of Day 01-02 7 7.9 10 10 8 10 11	9.4 02-03 8 9 7 7 9 9 11	03-04 7.9 9 7 8 7 8.9 9.9	7.9 7.2 8 7 8.1	65-06 7 7 7 8.9 8 7.2	9 11 9 9 10 10	9 07-08 11.9 13 11.9 11 10 10	13.2 08-09 14 13.9 15 12 12.9 11	14 09-10 16 15.9 16.9 16 16 13	14.2 14 10-11 18 15.9 19.9 23 15 14.9 17.8	16.2 16 11-12 19.8 20 17 17.9 17	15.2 12-13 17 17.8 16.9 20.9 17 17.9	16.2 17 13-14 18 18.9 19 19 16 16.9	15 14-15 15 20.7 16.9 17.9 18 16.8	17 15-16 18.8 18.9 17.9 15 18 18.8	16-17 17.8 17 16.9 17 18 15.9 14.9	16.2 17-18 16 16.9 15 17.9 20.9 16.9	17.2 17 18-19 18 16.9 19 20 19 17 16.9	16 17 19-20 15.8 19.8 18.8 15.9 19 17	16 15.2 20-21 16.8 17 16 15 16.9 15.9 16.9	13 14 21-22 15 16 14 15 17 14.9 16.9	14 22-23 13 13.9 13 14.9 15 15.8 13	23-2 13 11 11 10 12.9 13 13.9
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar	00-01 10.8 10 10 9 10 11.9 13	of Day 01-02 7 7.9 10 10 8 10 11	9.4 02-03 8 9 7 7 9 9 11	03-04 7.9 9 7 8 7 8.9 9.9	04-05 7.9 7 7.2 8 7 8.1 8	05-06 7 7 7 8.9 8 7.2 8	9 11 9 9 10 10	9 07-08 11.9 13 11.9 11 10 10	08-09 14 13.9 15 12 12.9 11 11	14 09-10 16 15.9 16.9 16 16 13 13.9	14.2 14 10-11 18 15.9 19.9 23 15 14.9 17.8	16.2 16 11-12 19.8 20 17 17.9 17 17.9 15	15.2 12-13 17 17.8 16.9 20.9 17 17.9 16	16.2 17 13-14 18 18 18.9 19 19 16 16.9	15 14-15 15 20.7 16.9 17.9 18 16.8 16	15-16 18.8 18.9 17.9 15 18 18.8 15	16-17 17.8 17 16.9 17 18 15.9 14.9	16.2 17-18 16 16.9 15 17.9 20.9 16.9 17	17.2 17 18-19 18 16.9 19 20 19 17 16.9	19-20 15.8 19.8 18.8 15.9 19 17 16	16 15.2 20-21 16.8 17 16 15 16.9 15.9 16.9	13 14 21-22 15 16 14 15 17 14.9 16.9	22-23 13 13.9 13 14.9 15 15.8 13	23-2 13 11 11 10 12.9 13 13.9
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar Mondays	10.8 10 10 10 9 10 11.9 13 by Hour	of Day 01-02 7 7.9 10 10 8 10 11 of Day 01-02 8	9.4 02-03 8 9 7 7 9 9 11	03-04 7.9 9 7 8 7 8.9 9.9	7.9 7.2 8 7 8.1 8	05-06 7 7 7 8.9 8 7.2 8	9 11 9 9 10 10 10	9 07-08 11.9 13 11.9 11 10 10 11	13.2 08-09 14 13.9 15 12 12.9 11 11 08-09 13	14 09-10 16 15.9 16.9 16 13 13.9 09-10 17.9	14.2 14 10-11 18 15.9 19.9 23 15 14.9 17.8	16.2 16 11-12 19.8 20 17 17.9 17 17.9 15	16 15.2 12-13 17 17.8 16.9 20.9 17 17.9 16	16.2 17 13-14 18 18.9 19 19 16 16.9	15 14-15 20.7 16.9 17.9 18 16.8 16	15-16 18.8 18.9 17.9 15 18 18.8 15	16-17 17.8 17 16.9 17 18 15.9 14.9	16.2 17-18 16 16.9 15 17.9 20.9 16.9 17	17.2 17 18-19 18 16.9 19 20 19 17 16.9	16 17 19-20 15.8 19.8 18.8 15.9 19 17 16	16 15.2 20-21 16.8 17 16 15 16.9 15.9 16.9 20-21	13 14 21-22 15 16 14 15 17 14.9 16.9	22-23 13 13.9 13.9 15.8 15.8 13	23-2 13 11 11 10 12.5 13 13.5 23-2
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar Mondays	00-01 10.8 10 10 9 10 11.9 13 by Hour 00-01 10	of Day 01-02 7 7.9 10 10 8 10 11 of Day 01-02 8 7.9	9.4 02-03 8 9 7 7 9 9 11 02-03 8.9 7	03-04 7.9 9 7 8 7 8.9 9.9	7.9 7.2 8 7 8.1 8 04-05 6	05-06 7 7 7 8.9 8 7.2 8	9 11 9 10 10 10 10 10	9 07-08 11.9 13 11.9 11 10 10 11 07-08 11 11	13.2 08-09 14 13.9 15 12 12.9 11 11 08-09 13 14	14 09-10 16 15.9 16.9 16 13 13.9 09-10 17.9 16.9	14.2 14 10-11 18 15.9 19.9 23 15 14.9 17.8	16.2 16 11-12 19.8 20 17 17.9 17 17.9 15 11-12 16.9 20.9	16 15.2 12-13 17 17.8 16.9 20.9 17 17.9 16	16.2 17 13-14 18 18.9 19 16 16.9 13-14 18.9 18	15 14-15 20.7 16.9 17.9 18 16.8 16 14-15 16.9	15-16 18.8 18.9 17.9 15 18 18.8 15 15-16 20 18.9	16-17 17.8 17 16.9 17 18 15.9 14.9	16.2 17-18 16 16.9 15 17.9 20.9 16.9 17 17-18	17.2 17 18-19 18 16.9 19 20 19 17 16.9 18-19 19.9	16 17 15.8 19.8 18.8 15.9 19 17 16	16 15.2 20-21 16.8 17 16 15 16.9 15.9 16.9 20-21 15.9	13 14 21-22 15 16 14 15 17 14.9 16.9	22-23 13 13.9 13.9 15.8 15.8 13	23-2 13 11 11 10 12.5 13 13.5 23-2 11
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar Mondays Tuesdays Wednesdays	00-01 10.8 10 10 9 10 11.9 13 by Hour 00-01 10 11	of Day 01-02 7 7.9 10 10 8 10 11 of Day 01-02 8 7.9 10	9.4 02-03 8 9 7 7 9 9 11 02-03 8.9 7 8.1	03-04 7.9 9 7 8 7 8.9 9.9	7.9 7.2 8 7 8.1 8 94-05 6 8	05-06 7 7 7 8.9 8 7.2 8 05-06 7	9 11 9 9 10 10 10 10 10 10	9 07-08 11.9 13 11.9 11 10 10 11 07-08 11 11	13.2 08-09 14 13.9 15 12 12.9 11 11 11 08-09 13 14 14	14 09-10 16 15.9 16.9 16 13 13.9 09-10 17.9 16.9 16.9	14.2 14 18 15.9 19.9 23 15 14.9 17.8	16.2 16 11-12 19.8 20 17 17.9 17 17.9 15 11-12 16.9 20.9	16 15.2 17 17.8 16.9 20.9 17 17.9 16	16.2 17 13-14 18 18.9 19 19 16.9 16.9	14-15 15 20.7 16.9 17.9 18 16.8 16 16 14-15 16.9 18	15-16 18.8 18.9 17.9 15 18 18.8 15 15-16 20 18.9	16-17 17.8 17 16.9 17 18 15.9 14.9 16-17 16.8 18 17	16.2 17-18 16 16.9 15 17.9 20.9 16.9 17 17-18 17	17.2 17 18-19 18 16.9 19 20 19 17 16.9 18-19 19.9 18	16 17 15.8 19.8 18.8 15.9 19 17 16 19-20 16.9 17	16 15.2 16.8 17 16 15 16.9 15.9 16.9 15.9 16.9	13 14 21-22 15 16 14 15 17 14.9 16.9 21-22 16 16	22-23 13 13.9 14.9 15 15.8 13 22-23 16 14	23-2 13 11 10 12.5 13 13.5 23-2 11 12 13
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2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar Mondays Tuesdays Wednesdays Trursdays Saturdays Saturdays Sundays Sundays Sundays Sundays Wednesdays Tuesdays Wednesdays Tuesdays Wednesdays Tuesdays Wednesdays Wednesdays Tuesdays	00-01 10.8 10 10 9 10 11.9 13 10 10 10 11.9 13 10 10 10 11 10 11 10 14 13 10 10 10 10 10 10 10 10 10 10 10 10 10	of Day 01-02 7 7-9 10 10 8 10 11 10 61 10 11 11 11 11 12 11 11 12 11 11 12 11 11	9.4 02-03 8 9 7 7 9 9 11 02-03 8.9 7 8.1 8 9 13 11 02-03 9.9 7 8 8 7 9	03-04 7.9 9 7 8.9 9.9 03-04 9 7 7 7 8 11 11	04-05 7.9 7 7.2 8 7 8.1 8 04-05 6 8 7 7 6 6 7 7 9	05-06 7 7 7 8.9 8 7.2 8 05-06 7 7 7,1.1 7,1 7,9 05-06 7 8,9 8 8 7 7,1,1	06-07 9 11 9 9 10 10 10 10 10 10 2 10 3 9 9 9 10.2 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10	9 07-08 11.9 13 11.9 10 10 11 10 07-08 11 11 11 11 11 11 11 11 11 1	13.2 08-09 14 13.9 15 12 12.9 11 11 11 13 14 14 14 15 13 12.9 08-09 14 12.9 14 16 17 18 19 19 19 19 19 19 19 19 19 19	09-10 16 15.9 16.9 16 16 16 13 13.9 09-10 17.9 16.9 16 18 17 14 14 14 15 17.8 18 17.9	14.2 14 10-11 18 15.9 15.9 17.8 10-11 18.9 21 18.9 17.8 18 14 16 10-11 19 16.9 18 17 18 17 18 17 18 17 18 18 18 19 19 19 19 19 19 19 19 19 19	16.2 16.2 19.8 20 17 17.9 15 15 11-12 16.9 20.9 20.9 20 18 16 16 16	16 15.2 12-13 17 17.8 16.9 20.9 16 16 12-13 19.9 18 18 18 18.9 12-13 17 19 18 18.9	16.2 17 13-14 18 18.1 19.9 19 16.9 13-14 18.9 18 17 20 18	14-15 16.9 18-15 16.9 18-16.9 18-15 16.9 19 18 19 19 18 10 19 17 17.9 17.8	15-16 18.8 18.9 17.9 15 18 18.8 15 20 18.9 21 20 19 16 15.9 16 17.9	16-17 17.8 17 16.9 14.9 16-17 16.8 18 17 17 16 16 17 17 17 16 16 16 14	16.2 17-18 16 16.9 17.9 20.9 17.18 17 18 18 19 19 17 16.9 17 16.9	17.2 17 18.19 18.19 20 19 19.17 16.9 18.15 19 21 18.19 21 18.19 21 18.19 17.9 16.9	16 17 15.8 19.8 15.9 19 17 16 16.9 17 17 17 17 18 18 14	20-21 16.8 17 16.9 15.9 16.9 20-21 15.9 13 14 16 15 16.9 20-21 13.9 16.9	21-22 15 16 14 15 17 14.9 21-22 21-22 21-22 14 14.8	22-23 13 13-9 15 15-8 13 22-23 16 14 12 14 15 15 13.9 22-23 12.9 12.9 12.9 12.9 12.9 13.9	23-2- 13 11 11 10 12.9-9- 11 12 13 13.9 14 12 10.9 23-2- 11 10.9 10.8 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10.9
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar Mondays Thursdays Fridays Saturdays Sundays Wednesdays Thursdays Fridays Saturdays Sundays Sundays Sundays Sundays Sundays Wednesdays Thursdays Tuesdays Wednesdays Wednesdays Wednesdays Wednesdays Wednesdays Wednesdays Thursdays	00-01 10.8 10 10 9 10 11.9 13 by Hours 11 10 14 13 by Hours 10 10 11 10 10 14 13	of Day 01-02 7 7-9 10 10 8 10 11 of Day 01-02 8 7-9 11 12 11 12 11 01 Day 01-02 01 00 01 00 01 00 01 00 01 00 01 00 01 00 01 00 01 00 00	9.4 02-03 8 9 7 7 9 9 11 02-03 8.9 7 8.1 8.9 9 13 11 02-03 7 8.1 02-03 10 10 10 10 10 10 10 10 10	03-04 7.9 9 7 8.9 9.9 9 7 7 7 8 11 11 11	04-05 7,9 7,2 8,1 8,1 8 04-05 6 6 8 7,7 6 6,7 9	05-06 7 7 7 7 8.9 8 7-2 8 05-06 7 7.1 7,1 7,1 7,9 05-06 7 8,9 8 7 7,1 8,9	06-07 9 11 9 9 10 10 10 10 10.3 9 9 10.2 12 10 10.3 9 10.2 12 10 10.3 10 10 10 10 10 10 10 10 10 10	9 07-08 11.9 13 11.9 10 10 11 11 11 11 11 11 11 11	13.2 14 13.9 15 12 12.9 11 11 11 11 12 13 14 14 17 15 13 12.9 08-09 14 12 13 14 14 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19	14 16 15.9 16.9 16.9 16.9 16.9 16.9 17.9 16.9 16.9 17.9 14.14 14.15 17.8 14.19 14.19	14.2 14 10-11 18 15.9 23 15 14.9 17.8 10-11 18.9 21 18.9 17.8 19.9 10-11 19.9 11.9 11.9 11.9 11.9 11.9 11.9 1	11-12 16.2 19.8 20 17 17.9 15 11-12 20.9 20.9 18 18 16 16 16 11-12 11-12 16 16 16 18.8 17	16 15.2 12.13 17 17.8 16.9 20.9 17 17.9 18 21 17 18 18 18 18 18.9 12-13 17 17 19.9 18.6 18.18 18.9	16.2 17 13-14 18 18 18 19 19 16 16.9 13-14 18 17 20 18 18 17 18 18 17 18 18 17 18 18 17 18 18 18 17 18 18 18 18 18 18 18 18 18 18	14-15 15 16.9 17.9 18 16.8 16.9 18 19 18 19 18 19 19 18 16 19 14-15 17.9 17.8 17	15-16 18.8 18.9 17.9 15 18 18.8 15 20 21 20 19 16 15.9 15-16 17.9	16-17 17.8 17 16.9 17 18 15.9 14.9 16.17 16.8 18 17 17 16 16 14 16-17 17.9 16.8 17 17.9 18.8	16.2 17-18 16 16.9 17-9 20.9 17-18 17 18 18 18 19 17 16.9 17-18 18 18.18 18.8 17.8	17.2 17 18.19 18 16.9 19 20 19 17 16.9 18.19 19 19 18 15 19 21 18.19 21 18.19 19.21 18.19 21 18.21 21 21 21 21 21 21 21 21 21 21 21 21 2	19-20 15.8 19.8 19.8 15.9 19 17 16.9 17.17 17.17 18.18 14.19 19-20 15.9 16.9 15.9 16.9 15.9	20-21 16.8 17 16.9 15.9 16.9 20-21 15.9 20-21 16.9 20-21 16.9 20-21 16.9 20-21 16.9	21-22 15 16 16 14 15 17 14.9 21-22 21-22 14 14.8 16.8	22-23 13 13,9 15,15 15.8 13 22-23 16 14 12 14 15 15 15 15 16 14 12 12 14,9 15 15 16 14 19 19 19 19 19 19 19 19 19 19 19 19 19	23-2-1 13 11 11 10 12.5-1 13 13.5-1 14 12 10.5-1 10.8-1 11.8-1 10.8-1 11.8-1 12.8-1 13.9-1 14.9-1 15.9-1 16.9-1 17
2018 Calendar Mondays Tuesdays Wednesdays Thursdays Fridays Saturdays Sundays 90th Percentile 2019 Calendar Mondays Tuesdays Wednesdays Thursdays Saturdays Sundays Sundays 10th Percentile 2020 Calendar Mondays Tuesdays Wednesdays Thursdays Sundays Sundays Thursdays Thursdays Sundays	00-01 10.8 10 10 9 10 11.9 13 10 10 10 11.9 13 10 10 10 11 10 11 10 14 13 10 10 10 10 10 10 10 10 10 10 10 10 10	of Day 01-02 7 7-9 10 10 8 10 11 10 61 10 11 11 11 11 12 11 11 12 11 11 12 11 11	9.4 02-03 8 9 7 7 9 9 11 02-03 8.9 7 8.1 8 9 13 11 02-03 9.9 7 8 8 7 9	03-04 7.9 9 7 8.9 9.9 03-04 9 7 7 7 8 11 11	04-05 7.9 7 7.2 8 7 8.1 8 04-05 6 8 7 7 6 6 7 7 9	05-06 7 7 7 8.9 8 7.2 8 05-06 7 7 7,1.1 7,1 7,9 05-06 7 8,9 8 8 7 7,1,1	06-07 9 11 10 10 10 10 10 10 10 10 2 10 3 9 9 9 10.2 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10	9 07-08 11.9 13 11.9 10 10 11 10 07-08 11 11 11 11 11 11 11 11 11 1	13.2 08-09 14 13.9 15 12 12.9 11 11 11 13 14 14 14 15 13 12.9 08-09 14 12.9 14 16 17 18 19 19 19 19 19 19 19 19 19 19	09-10 16 15.9 16.9 16 16 16 13 13.9 09-10 17.9 16.9 16 18 17 14 14 14 15 17.8 18 17.9	14.2 14 10-11 18 15.9 15.9 17.8 10-11 18.9 21 18.9 17.8 18 14 16 10-11 19 16.9 18 17 18 17 18 17 18 17 18 18 19 19 10 10 10 10 10 10 10 10 10 10	16.2 16.2 19.8 20 17 17.9 17.9 15 16.9 20.9 20 18 18 16 16 16	16 15.2 12-13 17 17.8 16.9 20.9 16 16 12-13 19.9 18 18 18 18.9 12-13 17 19 18 18.9	16.2 17 13-14 18 18.9 19 19 16 16.9 18 17 20 18 18 17 20 18 16 16 16 16 16 17 17	14-15 16-9 18-16-9 18-16-8 16-9 18-15-16-9 18-19-18-19-19-19-19-19-19-19-19-19-19-19-19-19-	15-16 18.8 18.9 17.9 15 18 18.8 15 20 18.9 21 20 19 16 15.9 16 17.9	16-17 17.8 17 16.9 14.9 16-17 16.8 18 17 17 16 16 17 17 17 16 16 16 14	16.2 17-18 16 16.9 17.9 20.9 17.18 17 18 18 19 19 17 16.9 17 16.9	17.2 17 18.19 18.19 20 19 19.17 16.9 18.15 19 21 18.19 21 18.19 21 18.19 17.9 16.9	19-20 15-8 18-8 15-9 19-16 16-9 17-17 17-17 18-18 18-14 19-20 15-9 15-9 15-9 15-9	20-21 16.8 17 16.9 15.9 16.9 20-21 15.9 13 14 16 15 16.9 20-21 13.9 16.9	13 14 21-22 15 16 14 15 17 16.9 16.9 21-22 16 16 16 16 16 16 16 16 16 16 16 16 16	22-23 13 13-9 15 15-8 13 22-23 16 14 12 14 15 15 13.9 22-23 12.9 12.9 12.9 12.9 12.9 13.9	23-2- 13 11 11 10 12.9-9- 11 12 13 13.9 14 12 10.9 23-2- 11 10.9 10.8 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10.9

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Mondays	00-01	01-02	02-03	03-04	84-65	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-
londays	10.8	8.0	7.6	8.0	7.7	7.3	9.5	12.4	14.8	19.4	17.6	18.6	16.3	16.9	17.3	17.5	14.3	13.8	15.2	13.9	15.2	14.4	14.3	11.
ondays	10.0	8.3	9.9	7.1	6.6	8.4	11.0	11.7	14.5	18.7	20.2	18.6	17.8	20.2	18.2	18.0	17.8	18.6	16.9	16.3	16.1	15.9	14.7	11.
ondays	11.3	9.2	8.7	9.2	7.2	7.0	10.8	12.5	14.6	21.5	22.2	21.4	20.5	19.9	18.4	23.5	19.7	18.3	19.0	17.0	17.5	15.3	13.3	11.
ondays	11.8	10.1	8.5	8.6	7.8	9.3	13.2	13.8	18.3	18.6	19.1	21.3	21.7	21.4	18.8	18.9	19.3	19.6	19.1	19.0	17.8	14.4	15.1	12
ondays	11.8	10.6	11.9	9.8	7.5	9.3	13.0	14.7	16.9	20.3	19.5	21.2	19.5	19.3	18.5	19.9	20.3	20.3	20.2	18.1	19.8	17.6	14.5	13
ondays	13.6	9.0	10.8	10.1	9.2	7.6	11.3	14.8	16.7	19.0	22.0	23.1	20.2	22.1	18.5	21.6	21.6	19.9	20.4	19.0	19.0	18.1	15.3	14
londays	13.1	10.2	10.8	11.2	7.8	9.0	15.0	13.8	16.4	20.9	22.6	19.9	23.8	21.8	21.3	22.1	19.1	20.5	22.6	20.0	21.1	18.5	17.9	13
londays	12.3	10.8	11.5	9.8	8.9	9.2	12.2	14.1	17.7	22.0	23.1	24.9	21.3	18.5	21.6	20.8	21.1	18.0	20.4	17.8	15.6	15.8	16.4	13
th Percentile resdays	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23
				03-04	8.2	U5-U6	00-07			15.4				17.2	16.9	16.5	15.8	17.1				15.5		
uesdays	12.2	9.4	10.1	7.1	OIL	7.2	8.3	10.8	14.3		18.0	17.5	14.9						13.2	18.2	15.6	2010	13.6	10
esdays	10.8	8.5	9.0	7.4	7.2	6.5	11.1	12.6	14.4	15.7	16.3	16.6	20.4	17.9	18.2	17.8	16.9	17.7	17.4	14.9	15.5	12.6	13.9	10
iesdays	10.1	8.6	10.0	7.3	8.2	8.0	10.0	12.3	13.5	17.0	20.1	18.8	18.5	19.0	21.6	19.3	19.1	15.7	18.3	16.0	14.3	16.8	13.4	11
esdays	11.7	11.1	8.9	8.6	6.7	7.5	12.2	13.3	15.8	17.7	20.5	18.9	20.0	17.7	18.2	18.8	21.0	20.6	20.5	18.8	17.1	16.4	15.4	13
uesdays	11.7	9.5	9.2	10.6	9.1	9.4	13.7	12.7	15.5	18.2	20.8	20.8	19.4	20.6	21.4	22.7	21.1	18.7	20.4	18.5	17.5	17.2	15.3	13
uesdays	12.6	9.1	11.0	9.8	8.6	8.4	12.7	15.0	17.2	17.7	18.8	24.3	20.8	21.2	22.9	21.9	20.3	19.6	19.9	23.1	19.8	18.4	17.2	14
uesdays	14.4	10.6	9.5	9.4	9.2	8.5	12.1	13.0	16.9	20.8	23.6	23.7	22.6	22.2	19.7	21.4	21.2	21.1	21.6	20.1	15.6	17.7	18.0	14
esdays	11.0	8.8	8.2	8.6	8.9	10.2	11.9	15.4	14.5	19.5	19.3	19.1	21.5	20.2	19.2	20.4	20.6	20.5	20.5	19.0	20.1	16.6	14.6	12
th Percentile	00.01	01.00	03.00	93.9¢	04.05	or or	05.00	07.00	00.00	00.10	10.11	11.10	13.12	13.14	14.15	15.16	16.17	1710	10.10	10.20	20.27	21.20	22.22	90
edinesdays	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09 14.2	09-10 18.0	10-11 18.3	11-12 16.9	12-13 16.6	13-14	14-15 18.0	15-16 16.9	16-17	17-18 16.9	18-19 15.3	19-20 16.4	20-21	21-22	22-23 13.0	23-
ednesdays	10.3	7.2	9.2	7.9	7.0	7.9	9.3	11.9				16.9		18.6			17.1				12.7	12.8		11
ednesdays	9.4	9.8	10.9	9.3	8.8	8.0	10.3	12.3	18.1	19.1	18.3	20.4	17.7	17.5	18.7	17.2	18.8	16.6	17.5	17.1	15.8	14.4	13.8	10
ednesdays	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10
ednesdays	10.5	9.9	8.2	7.7	8.9	7.5	11.5	12.4	17.2	19.0	18.0	20.0	18.7	18.8	19.2	18.3	17.8	18.6	17.9	17.7	15.6	17.2	14.5	14
ednesdays	10.7	10.3	9.2	8.5	8.4	9.7	12.6	11.9	17.5	18.9	21.4	21.7	20.5	22.7	21.1	22.4	20.3	22.1	21.3	21.3	18.4	17.3	13.8	13
ednesdays	13.0	11.5	9.1	9.4	8.9	8.6	12.8	14.1	18.7	19.7	24.1	21.0	20.9	22.5	23.4	20.9	21.3	18.7	22.1	23.0	18.6	17.3	17.2	13
'ednesdays	12.0	11.2	10.6	9.2	8.5	10.5	12.2	13.8	17.3	19.0	22.5	22.5	23.9	21.0	24.0	24.4	20.5	20.8	18.0	21.3	17.0	15.2	15.2	14
'ednesdays	12.5	11.5	10.1	10.2	8.6	9.4	13.9	14.5	16.1	17.3	20.2	21.5	22.2	20.1	20.4	22.2	21.1	21.9	22.6	18.2	17.5	16.3	16.7	13
th Percentile																								
ursdays	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23
nursdays	9.3	8.8	8.6	7.7	7.2	9.0	8.3	12.9	13.6	14.5	19.4	20.2	18.5	18.3	18.4	18.2	19.0	17.1	16.7	16.0	14.8	14.3	12.0	12
ursdays	8.8	7.9	7.3	8.0	7.7	7.2	9.8	12.2	13.7	16.9	19.6	18.0	18.6	18.1	18.4	17.4	16.6	17.9	16.2	17.8	15.2	15.3	14.7	11
wrsdays	12.0	9.4	7.5	6.5	7.3	7.3	10.7	10.6	16.6	17.3	19.3	19.9	18.3	21.0	19.0	18.1	16.9	18.5	19.4	17.9	17.7	16.0	14.0	10
wrsdays	11.3	11.3	9.2	9.5	7.4	7.6	11.4	13.9	14.2	17.1	20.8	18.1	20.0	19.7	18.6	20.8	19.5	20.5	20.4	16.3	16.5	15.6	13.6	11
wursdays	13.1	10.8	9.8	10.5	7.9	8.7	12.6	13.3	16.7	18.8	19.3	24.3	20.0	22.0	20.9	19.9	19.4	20.0	20.2	20.0	17.3	16.8	14.0	17
hursdays	12.7	12.4	9.2	9.9	8.4	10.5	11.2	14.3	15.4	18.6	24.3	20.9	23.3	22.1	20.9	18.7	19.1	20.5	23.5	19.4	19.5	18.1	17.5	12
hursdays	12.4	10.2	10.6	8.9	8.8	8.9	11.7	15.5	18.9	21.8	19.0	21.1	20.9	21.9	20.6	22.9	20.3	23.1	21.0	19.8	19.2	17.7	16.6	14
hursdays	13.4	11.5	8.6	8.7	8.3	9.7	13.6	13.5	19.1	19.8	21.3	20.9	20.5	20.4	20.3	20.4	21.7	21.0	21.5	17.9	18.6	19.2	14.3	15
Sth Percentile																								
ridays	00-01				04-05	05-06	06-07																22-23	23
		01-02	02-03	03-04				07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22		
ridays	10.4	01-02 9.6	02-03 8.0	8.2	6.8	7.4	8.0	9.6	13.1	09-10 16.3	10-11	11-12 17.3	12-13 18.5	13-14 18.1	17.5		16-17 16.7	17-18 17.0	18-19 14.6	19-20 16.0	20-21 16.0	21-22 15.5	14.4	13
	10.4 11.1															15-16 19.2 18.7								13
ridays	11.1	9.6 9.1	8.0 9.8	8.2 7.3	6.8		8.0 10.3	9.6 11.2	13.1 12.5	16.3 18.6	18.4 16.9	17.3 18.6	18.5	18.1 18.6	17.5 19.1	19.2 18.7	16.7 17.8	17.0 18.8	14.6 15.9	16.0 17.5	16.0 13.9	15.5 14.4	14.4 14.9	13
ridays ridays	11.1 11.2	9.6 9.1 9.2	9.8 8.6	8.2 7.3 9.1	6.8	7.4 6.5 7.9	8.0 10.3 10.1	9.6 11.2 12.5	13.1 12.5 15.1	16.3 18.6 17.4	18.4 16.9 18.2	17.3 18.6 18.9	18.5 17.9 20.0	18.1 18.6 19.3	17.5 19.1 18.9	19.2	16.7 17.8 18.2	17.0 18.8 18.8	14.6 15.9 18.2	16.0 17.5 16.1	16.0 13.9 15.5	15.5 14.4 14.0	14.4 14.9 15.9	13 13
idays idays idays	11.1 11.2 11.9	9.6 9.1 9.2 11.7	8.0 9.8 8.6 10.1	8.2 7.3	6.8	7.4 6.5	8.0 10.3 10.1 9.7	9.6 11.2 12.5 14.2	13.1 12.5 15.1 16.0	16.3 18.6 17.4 17.7	18.4 16.9	17.3 18.6	18.5 17.9 20.0 19.4	18.1 18.6 19.3 20.0	17.5 19.1 18.9 17.7	19.2 18.7 17.2 22.7	16.7 17.8	17.0 18.8 18.8 19.4	14.6 15.9 18.2 18.4	16.0 17.5	16.0 13.9 15.5 16.3	15.5 14.4 14.0 17.5	14.4 14.9 15.9 16.0	13 13
idays idays idays idays	11.1 11.2 11.9 12.0	9.6 9.1 9.2 11.7 13.0	8.0 9.8 8.6 10.1 10.0	8.2 7.3 9.1 9.8 8.4	7.0 7.3 8.8 8.5	7.4 6.5 7.9 9.7 9.5	8.0 10.3 10.1 9.7 12.1	9.6 11.2 12.5 14.2 14.6	13.1 12.5 15.1 16.0 15.8	16.3 18.6 17.4 17.7 19.5	18.4 16.9 18.2 17.3 21.6	17.3 18.6 18.9 17.9 22.2	18.5 17.9 20.0 19.4 19.1	18.1 18.6 19.3	17.5 19.1 18.9	19.2 18.7 17.2 22.7 21.0	16.7 17.8 18.2 17.5 21.4	17.0 18.8 18.8	14.6 15.9 18.2 18.4 20.8	16.0 17.5 16.1 17.8 21.1	16.0 13.9 15.5 16.3 19.6	15.5 14.4 14.0 17.5 18.8	14.4 14.9 15.9 16.0 17.6	13 13 14 15
ridays ridays ridays ridays ridays ridays	11.1 11.2 11.9 12.0 13.7	9.6 9.1 9.2 11.7 13.0 11.1	8.0 9.8 8.6 10.1 10.0 11.4	8.2 7.3 9.1 9.8 8.4 8.5	6.8 7.0 7.3 8.8 8.5 9.7	7.4 6.5 7.9 9.7 9.5 9.9	8.0 10.3 10.1 9.7 12.1 11.1	9.6 11.2 12.5 14.2 14.6 12.9	13.1 12.5 15.1 16.0 15.8 15.3	16.3 18.6 17.4 17.7 19.5 18.0	18.4 16.9 18.2 17.3 21.6 18.0	17.3 18.6 18.9 17.9 22.2 20.2	18.5 17.9 20.0 19.4	18.1 18.6 19.3 20.0 18.8 23.6	17.5 19.1 18.9 17.7 20.8 25.2	19.2 18.7 17.2 22.7 21.0 21.5	16.7 17.8 18.2 17.5 21.4 21.8	17.0 18.8 18.8 19.4	14.6 15.9 18.2 18.4 20.8 22.0	16.0 17.5 16.1 17.8 21.1 21.9	16.0 13.9 15.5 16.3 19.6 20.2	15.5 14.4 14.0 17.5 18.8 19.1	14.4 14.9 15.9 16.0 17.6 17.3	13 13 14 15
idays idays idays idays idays idays	11.1 11.2 11.9 12.0 13.7 12.2	9.6 9.1 9.2 11.7 13.0 11.1 12.5	8.0 9.8 8.6 10.1 10.0 11.4 11.0	8.2 7.3 9.1 9.8 8.4 8.5 9.7	6.8 7.0 7.3 8.8 8.5 9.7 8.9	7.4 6.5 7.9 9.7 9.5 9.9 8.4	8.0 10.3 10.1 9.7 12.1 11.1 11.4	9.6 11.2 12.5 14.2 14.6 12.9 14.4	13.1 12.5 15.1 16.0 15.8 15.3 17.4	16.3 18.6 17.4 17.7 19.5 18.0 20.7	18.4 16.9 18.2 17.3 21.6 18.0 21.3	17.3 18.6 18.9 17.9 22.2 20.2 21.3	18.5 17.9 20.0 19.4 19.1 20.1 23.6	18.1 18.6 19.3 20.0 18.8 23.6 20.3	17.5 19.1 18.9 17.7 20.8 25.2 21.6	19.2 18.7 17.2 22.7 21.0 21.5 22.3	16.7 17.8 18.2 17.5 21.4	17.0 18.8 18.8 19.4 20.3 22.4 23.9	14.6 15.9 18.2 18.4 20.8 22.0 20.3	16.0 17.5 16.1 17.8 21.1 21.9 22.6	16.0 13.9 15.5 16.3 19.6 20.2 17.2	15.5 14.4 14.0 17.5 18.8 19.1 18.1	14.4 14.9 15.9 16.0 17.6 17.3 18.5	13 13 14 15 15
idays idays idays idays idays idays	11.1 11.2 11.9 12.0 13.7	9.6 9.1 9.2 11.7 13.0 11.1	8.0 9.8 8.6 10.1 10.0 11.4	8.2 7.3 9.1 9.8 8.4 8.5	6.8 7.0 7.3 8.8 8.5 9.7	7.4 6.5 7.9 9.7 9.5 9.9	8.0 10.3 10.1 9.7 12.1 11.1	9.6 11.2 12.5 14.2 14.6 12.9	13.1 12.5 15.1 16.0 15.8 15.3	16.3 18.6 17.4 17.7 19.5 18.0	18.4 16.9 18.2 17.3 21.6 18.0	17.3 18.6 18.9 17.9 22.2 20.2	18.5 17.9 20.0 19.4 19.1	18.1 18.6 19.3 20.0 18.8 23.6	17.5 19.1 18.9 17.7 20.8 25.2	19.2 18.7 17.2 22.7 21.0 21.5	16.7 17.8 18.2 17.5 21.4 21.8	17.0 18.8 18.8 19.4	14.6 15.9 18.2 18.4 20.8 22.0	16.0 17.5 16.1 17.8 21.1 21.9	16.0 13.9 15.5 16.3 19.6 20.2	15.5 14.4 14.0 17.5 18.8 19.1	14.4 14.9 15.9 16.0 17.6 17.3	13 13 14 15 15
ridays ridays ridays ridays ridays ridays ridays	11.1 11.2 11.9 12.0 13.7 12.2	9.6 9.1 9.2 11.7 13.0 11.1 12.5	8.0 9.8 8.6 10.1 10.0 11.4 11.0	8.2 7.3 9.1 9.8 8.4 8.5 9.7	6.8 7.0 7.3 8.8 8.5 9.7 8.9	7.4 6.5 7.9 9.7 9.5 9.9 8.4	8.0 10.3 10.1 9.7 12.1 11.1 11.4	9.6 11.2 12.5 14.2 14.6 12.9 14.4	13.1 12.5 15.1 16.0 15.8 15.3 17.4	16.3 18.6 17.4 17.7 19.5 18.0 20.7	18.4 16.9 18.2 17.3 21.6 18.0 21.3	17.3 18.6 18.9 17.9 22.2 20.2 21.3	18.5 17.9 20.0 19.4 19.1 20.1 23.6	18.1 18.6 19.3 20.0 18.8 23.6 20.3	17.5 19.1 18.9 17.7 20.8 25.2 21.6	19.2 18.7 17.2 22.7 21.0 21.5 22.3	16.7 17.8 18.2 17.5 21.4 21.8	17.0 18.8 18.8 19.4 20.3 22.4 23.9	14.6 15.9 18.2 18.4 20.8 22.0 20.3	16.0 17.5 16.1 17.8 21.1 21.9 22.6	16.0 13.9 15.5 16.3 19.6 20.2 17.2	15.5 14.4 14.0 17.5 18.8 19.1 18.1	14.4 14.9 15.9 16.0 17.6 17.3 18.5	13
ridays ridays ridays ridays ridays ridays ridays ridays ridays	11.1 11.2 11.9 12.0 13.7 12.2	9.6 9.1 9.2 11.7 13.0 11.1 12.5	8.0 9.8 8.6 10.1 10.0 11.4 11.0	8.2 7.3 9.1 9.8 8.4 8.5 9.7	6.8 7.0 7.3 8.8 8.5 9.7 8.9	7.4 6.5 7.9 9.7 9.5 9.9 8.4	8.0 10.3 10.1 9.7 12.1 11.1 11.4	9.6 11.2 12.5 14.2 14.6 12.9 14.4	13.1 12.5 15.1 16.0 15.8 15.3 17.4	16.3 18.6 17.4 17.7 19.5 18.0 20.7	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1	17.5 19.1 18.9 17.7 20.8 25.2 21.6	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1	17.0 18.8 18.8 19.4 20.3 22.4 23.9	14.6 15.9 18.2 18.4 20.8 22.0 20.3	16.0 17.5 16.1 17.8 21.1 21.9 22.6	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9	14.4 14.9 15.9 16.0 17.6 17.3 18.5	13 13 14 15 15 17 15
ridays	11.1 11.2 11.9 12.0 13.7 12.2 11.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0	8.0 9.8 8.6 10.1 10.0 11.4 11.0 10.2	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8	18.4 16.9 18.2 17.3 21.6 18.0 21.3	17.3 18.6 18.9 17.9 22.2 20.2 21.3	18.5 17.9 20.0 19.4 19.1 20.1 23.6	18.1 18.6 19.3 20.0 18.8 23.6 20.3	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9	19.2 18.7 17.2 22.7 21.0 21.5 22.3	16.7 17.8 18.2 17.5 21.4 21.8	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4	16.0 13.9 15.5 16.3 19.6 20.2 17.2	15.5 14.4 14.0 17.5 18.8 19.1 18.1	14.4 14.9 15.9 16.0 17.6 17.3 18.5	13 13 14 15 15 15 15 23
ridays	11.1 11.2 11.9 12.0 13.7 12.2 11.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5	8.0 9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1	13 14 15 15 15 17 15 23
ridays sth Percentile ofundays aturdays aturdays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0	9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-22 17.2	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5	13 13 14 15 15 15 15 15 15 15 15
ndays ndays ndays ndays ndays ndays ndays ndays ndays stridays aturdays aturdays aturdays aturdays aturdays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9	8.0 9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 08-09 10.1 10.7 12.7	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.8	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-22 17.2 17.0 17.4	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7	13 14 15 15 11 15 15
ridays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6	8.0 9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7 9.1	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 08-09 10.1 10.7 12.7 12.9	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7 19.0	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 18.5 17.8 17.1	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3 17.5	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5 19.7	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3	15.5 14.4 14.0 17.5 18.8 19.1 16.9 21-22 17.2 17.0 17.4	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0	13 14 15 15 15 15 15 15 15 15 15 15 15 15 15
ridays ridays ridays ridays ridays ridays ridays ridays stridays Sth Percentile sturdays sturdays sturdays sturdays sturdays sturdays sturdays sturdays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6 14.4	8.0 9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 9.8 12.4 14.0	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1 11.6	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 9.7 9.1	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 08-09 10.1 10.7 12.7 12.9 16.3	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9 17.8	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7 19.0 17.5	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.8 17.1 18.5	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6	16.7 17.8 18.2 17.5 21.4 20.6 22.1 16-17 14.4 15.1 17.3 17.5 19.6	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.1 17.8 18.7 20.0	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5 19.7 20.3	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3 18.3	15.5 14.4 14.0 17.5 18.8 19.1 16.9 21-22 17.0 17.4 17.0 15.4	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 16.1 16.0	13 14 15 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
idays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6 13.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6 14.4 12.4	9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4 14.0 11.9	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1 11.6 10.5	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7 9.1 9.4 10.0	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1 10.4	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1 12.1 11.9	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2 10.1	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 08-09 10.1 10.7 12.7 12.9 16.3 13.4	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3 15.5	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9 17.8	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0 20.3	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7 19.0 17.5 20.9	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.1 18.5 20.0	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9 20.2	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6 21.2	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3 17.5 19.6	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7 20.0 21.0	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5 19.7 20.3 20.0	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0 19.3 22.1	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3 18.3	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-22 17.2 17.0 17.4 17.0 15.4 16.5	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 16.1 16.0 18.3	133 133 134 149 159 159 159 159 159 159 159 159 159 15
ridays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6 13.8 16.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6 14.4	9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4 14.0 11.9 14.8	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1 11.6 10.5 12.9	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7 9.1 9.4 10.0 10.1	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1 10.4 9.1	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1 12.1 11.9	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2 10.1 12.1 13.9	13.1 12.5 15.1 16.0 15.8 17.4 14.9 08-09 10.1 10.7 12.7 12.9 16.3 13.4 14.1	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3 15.5 16.0	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9 17.8 17.4	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0 20.3 17.8	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7 19.0 17.5 20.9	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.8 17.1 18.5 12.0 18.5	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9 20.2	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6 21.2 18.7	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3 17.5 19.6 18.1	17.0 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7 20.0 21.0 19.9	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5 19.7 20.3 20.0 22.5	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0 19.3 22.1 20.7	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3 18.3 18.6	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-22 17.2 17.0 17.4 17.0 15.5 17.4	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 16.1 16.0 18.3	133 133 144 155 157 157 157 157 157 157 157 157 157
idays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6 13.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6 14.4 12.4	9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4 14.0 11.9	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1 11.6 10.5	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7 9.1 9.4 10.0	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1 10.4	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1 12.1 11.9	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2 10.1	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 08-09 10.1 10.7 12.7 12.9 16.3 13.4	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3 15.5	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9 17.8	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0 20.3	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7 19.0 17.5 20.9	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.1 18.5 20.0	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9 20.2	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6 21.2	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3 17.5 19.6	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7 20.0 21.0	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5 19.7 20.3 20.0	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0 19.3 22.1	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3 18.3	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-22 17.2 17.0 17.4 17.0 15.4 16.5	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 16.1 16.0 18.3	133 133 144 155 157 157 157 157 157 157 157 157 157
idays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6 13.8 16.8	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6 14.4	9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4 14.0 11.9 14.8	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1 11.6 10.5 12.9	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7 9.1 9.4 10.0 10.1	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1 10.4 9.1	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1 12.1 11.9	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2 10.1 12.1 13.9	13.1 12.5 15.1 16.0 15.8 17.4 14.9 08-09 10.1 10.7 12.7 12.9 16.3 13.4 14.1	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3 15.5 16.0	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9 17.8 17.4	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0 20.3 17.8	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 12-13 16.9 15.3 18.7 19.0 17.5 20.9	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.8 17.1 18.5 12.0 18.5	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9 20.2	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6 21.2 18.7	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3 17.5 19.6 18.1	17.0 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7 20.0 21.0 19.9	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 18-19 15.0 16.6 16.5 19.7 20.3 20.0 22.5	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0 19.3 22.1 20.7	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3 18.3 18.6	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-22 17.2 17.0 17.4 17.0 15.5 17.4	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 16.1 16.0 18.3	133 144 151 161 171 171 171 171 171 171 171 171 17
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idays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6 13.8 16.8 12.5	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.9 12.6 14.4 13.2	8.0 9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4 14.0 11.9	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 03-04 03-04 03-04	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 7.6 8.9 8.7 9.1 9.4 10.0 10.1 8.3	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 8.6 9.1 10.4 9.1 8.2 9.4	8.0 10.3 10.1 9.7 12.1 11.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1 12.1 11.9	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 9.8 10.3 8.3 11.2 10.1 12.1 13.9 12.9	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 10.1 10.7 12.7 12.9 16.3 13.4 14.1 14.2	16.3 18.6 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3 15.5 16.0 17.7	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 15.9 17.8 17.8 17.8 19.1	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0 20.3 17.8 18.4	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 21.6 15.3 18.7 19.0 17.5 20.9 21.5 18.0	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 13-14 15.4 18.5 17.1 18.5 20.0 17.9	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9 20.2 19.5 20.1	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6 21.2 18.7 20.5	16.7 17.8 18.2 17.5 21.4 21.8 20.6 22.1 16-17 14.4 15.1 17.3 17.5 19.6 18.1 19.2 23.0	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7 20.0 21.0 19.9 19.4	14.6 15.9 18.2 18.4 20.8 22.0 23.1 18-19 15.0 16.6 16.5 19.7 20.3 20.0 22.5 23.1	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-20 14.7 16.1 18.8 21.0 19.3 22.1 20.7 21.4	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.2 18.3 18.3 18.3 18.6 19.5	15.5 14.4 14.0 17.5 18.8 19.1 18.1 16.9 21-72 17.2 17.0 17.4 17.0 15.4 17.4 17.2	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 16.1 16.0 18.3 17.9 15.6	233 115 115 115 115 115 115 115 115 115 1
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nidays ridays ridays ridays ridays ridays ridays ridays ship Percentile ridays	11.1 11.2 11.9 12.0 13.7 12.2 11.8 00-01 12.1 12.5 12.8 13.9 13.6 13.8 16.8 12.5 00-01 13.2 12.0 13.2 14.3	9.6 9.1 9.2 11.7 13.0 11.1 12.5 10.0 01-02 12.5 12.0 12.9 12.6 14.4 12.4 14.4 13.2 01-02 11.1 14.1 12.5 14.1 14.1 15.1 16.1 17.1 1	9.8 8.6 10.1 10.0 11.4 11.0 10.2 02-03 11.7 13.7 9.8 12.4 14.0 11.9 02-03 11.9 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8 13.8 14.8 15.8 16.8 1	8.2 7.3 9.1 9.8 8.4 8.5 9.7 9.4 03-04 9.9 9.0 9.2 9.1 11.6 10.5 12.9 12.1 03-04 10.5 9.5 9.3 11.4 10.4	6.8 7.0 7.3 8.8 8.5 9.7 8.9 9.6 04-05 8.9 9.1 9.4 10.0 10.1 8.3 04-05 8.2 7.7 8.4 8.5	7.4 6.5 7.9 9.7 9.5 9.9 8.4 9.8 05-06 6.7 7.1 10.4 9.1 8.2 9.4 05-06 7.3 7.4 7.2 8.5 9.9	8.0 10.3 10.1 9.7 12.1 11.4 11.5 06-07 8.7 10.9 9.3 11.1 11.6 11.2	9.6 11.2 12.5 14.2 14.6 12.9 14.4 16.0 07-08 10.3 8.3 11.2 10.1 12.1 13.9 12.9 07-08 11.6 9.8 11.2 12.9	13.1 12.5 15.1 16.0 15.8 15.3 17.4 14.9 03-09 10.1 10.7 12.9 16.3 13.4 14.1 14.2 03-09 11.5 11.5 11.5 11.5	16.3 18.6 17.4 17.7 19.5 18.0 20.7 18.8 09-10 14.7 14.2 14.6 16.2 17.3 15.5 16.0 17.7	18.4 16.9 18.2 17.3 21.6 18.0 21.3 21.2 10-11 14.6 14.8 16.4 15.9 17.8 17.8 17.8 19.1 10-11 13.7 16.2 15.0 17.8 15.0 17.8 15.0 17.8	17.3 18.6 18.9 17.9 22.2 20.2 21.3 22.2 11-12 17.5 16.4 19.4 16.3 19.0 20.3 17.8 18.4 11-12 17.6 15.6 17.6 15.6 17.6 17.6 17.6 17.6 17.6 17.6	18.5 17.9 20.0 19.4 19.1 20.1 23.6 21.6 16.9 15.3 18.7 19.0 17.5 20.9 21.5 18.0	18.1 18.6 19.3 20.0 18.8 23.6 20.3 20.1 15.4 15.4 18.5 17.1 18.5 20.0 22.9 17.9 13-14 15.1 15.2 17.9	17.5 19.1 18.9 17.7 20.8 25.2 21.6 23.9 14-15 15.5 18.6 15.8 18.0 21.9 20.2 19.5 20.1	19.2 18.7 17.2 22.7 21.0 21.5 22.3 20.7 15-16 14.9 16.6 17.1 17.9 17.6 21.2 18.7 20.5	16.7 17.8 18.2 17.5 21.8 20.6 22.1 16-17 14.4 15.1 17.5 19.6 18.1 19.2 23.0 16-17 14.4 15.1 19.2 19.6 18.1 19.2 19.4 19.4 19.4 19.4 19.4 19.4 19.4 19.4	17.0 18.8 18.8 19.4 20.3 22.4 23.9 21.5 17-18 16.2 16.1 17.8 18.7 20.0 21.0 21.0 19.9 19.4	14.6 15.9 18.2 18.4 20.8 22.0 20.3 23.1 15.0 16.6 16.5 19.7 20.3 20.0 22.5 23.1 18.19 15.9 17.4 17.9 19.1 17.9	16.0 17.5 16.1 17.8 21.1 21.9 22.6 22.4 19-70 14.7 16.1 18.8 21.0 19.3 22.1 20.7 21.4 19-20 16.6 13.8 18.5 17.4 19.6	16.0 13.9 15.5 16.3 19.6 20.2 17.2 19.0 20-21 16.5 17.4 16.5 18.3 18.3 18.3 18.6 19.5 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21 19.0 20-21	15.5 14.4 14.0 17.5 18.8 19.1 16.9 17.2 17.0 17.4 17.0 15.4 16.5 21.72 21.72 21.72 17.2 17.4 17.0 15.4 16.5	14.4 14.9 15.9 16.0 17.6 17.3 18.5 16.1 22-23 14.5 15.7 17.0 18.3 17.9 15.6 22.23 14.5 12.3 14.5 17.3 17.9 17.8 17.9 18.9	13 13 14 15 15 17 19 23 13 13 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15

Appendix C-7: 2019 Statistical Measures – Hour of Day and Day of Week

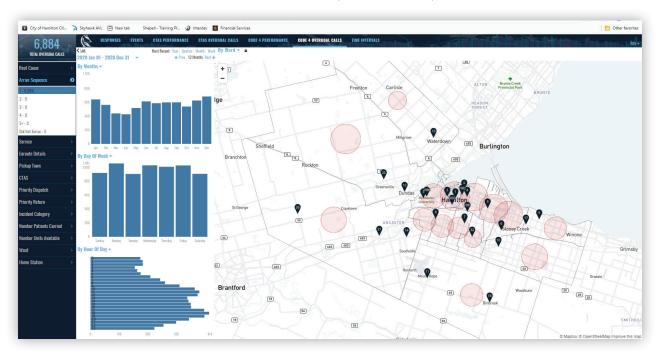
019 Time O	Task																								
	90% TOT	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	-
ondays	90% TOT	1.88	1.64	1.75	1.64	1.62	1.48	1.74	1.92	1.93	2.15	2.16	2.54	2.69	2.63	2.59	2.50	2.32	2.25	2.33	2.51	2.28	2.82	2.05	2
esdays	90% TOT	1.89	1.69	1.74	1.73	1.62	1.60	1.69	1.94	1.94	2.24	2.63	3.19	3.31	3.46	3.32	3.19	3.32	2.87	2.57	2.99	2.65	2.37	2.49	-
ednesdays		1.95	2.05	2.07	1.86	1.82	1.52	1.74	2.02	2.24	2.47	2.99	3.12	3.59	3.45	3.34	3.32	2.90	2.55	2.42	2.46	2.26	2.36	2.17	3
wursdays	90% TOT	1.72	1.85	1.88	1.75	1.87	1.63	1.69	1.83	1.94	2.20	2.36	2.62	2.83	3.05	2.94	2.85	2.63	2.48	2.40	2.35	2.18	2.23	2.10	1
idays	90% TOT	1.74	1.81	1.70	1.62	1.75	1.54 1.61	1.70	1.95	1.99 1.86	2.32	2.48	2.70	2.80	3.09	3.14	2.92	2.65	2.63	2.53	2.77	2.45	2.35	2.19	-
iturdays			1.65																	2.36					
ndays	90% TOT	1.97	1.88	1.83	1.69	1.80	1.61	1.61	1.82	2.01	2.03	2.09	2.24	2.46	2.33	2.24	2.50	2.19	1.98	2.06	2.17	1.92	1.94	2.01	1
	3rd Quartile	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
iondays	3rd Quartile	1.41	1.37	1.32	1.36	1.31	1.21	1.33	1.51	1.59	1.62	1.60	1.71	1.75	1.82	1.88	1.83	1.76	1.60	1.62	1.62	1.57	1.44	1.42	,
esdays	3rd Quartile	1.39	1.28	1.36	1.32	1.42	1.32	1.33	1.52	1.56	1.68	1.77	2.04	2.02	2.19	2.23	2.05	2.13	1.79	1.67	1.86	1.64	1.65	1.63	
ednesdavs	3rd Quartile	1.47	1.47	1.49	1.43	1.43	1.22	1.37	1.53	1.66	1.69	1.93	2.01	2.23	2.17	2.18	2.14	1.98	1.74	1.71	1.77	1.60	1.55	1.54	1
wirsdays	3rd Quartile	1.34	1.45	1.47	1.35	1.46	1.30	1.31	1.50	1.58	1.64	1.68	1.79	1.92	2.00	1.95	1.95	1.99	1.67	1.66	1.61	1.57	1.54	1.57	1
idays	3rd Quartile	1.39	1.40	1.36	1.29	1.36	1.26	1.39	1.55	1.57	1.69	1.71	1.91	1.88	1.90	2.16	2.02	1.86	1.80	1.63	1.76	1.64	1.58	1.62	1
iturdays	3rd Quartile	1.42	1.34	1.38	1.33	1.37	1.28	1.25	1.45	1.50	1.63	1.75	1.89	1.85	1.97	2.05	1.99	1.94	1.70	1.70	1.75	1.60	1.54	1.51	
ındays	3rd Quartile	1.52	1.41	1.33	1.34	1.51	1.29	1.26	1.45	1.51	1.62	1.57	1.64	1.63	1.74	1.73	1.73	1.67	1.55	1.51	1.61	1.48	1.48	1.52	
,-																									
	Average	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
ondays	Average	1.06	0.96	0.96	0.97	1.00	0.96	0.91	1.12	1.18	1.22	1.20	1.30	1.33	1.34	1.38	1.38	1.26	1.20	1.17	1.23	1.25	1.08	1.09	1
uesdays	Average	1.05	0.97	1.15	1.03	1.13	0.99	0.94	1.15	1.16	1.32	1.36	1.49	1.49	1.63	1.58	1.49	1.60	1.36	1.18	1.34	1.27	1.22	1.20	1
ednesdays	Average	1.10	1.12	1.16	1.10	1.14	0.95	0.98	1.16	1.26	1.34	1.47	1.49	1.62	1.58	1.55	1.52	1.42	1.27	1.20	1.27	1.19	1.20	1.13	1
wrsdays	Average	0.98	1.08	1.09	1.03	1.13	1.03	0.95	1.04	1.19	1.31	1.27	1.31	1.40	1.46	1.42	1.40	1.39	1.24	1.22	1.18	1.19	1.18	1.16	1
idays	Average	1.04	1.09	1.09	1.01	1.04	0.98	0.94	1.16	1.13	1.26	1.32	1.38	1.44	1.45	1.56	1.45	1.37	1.33	1.19	1.32	1.23	1.20	1.23	1
iturdays	Average	1.17	1.01	1.02	1.07	1.04	0.95	0.90	1.06	1.14	1.21	1.37	1.43	1.38	1.49	1.47	1.43	1.39	1.26	1.23	1.26	1.21	1.20	1.09	1
ndays	Average	1.05	1.04	1.01	1.00	1.14	1.03	0.87	1.11	1.18	1.24	1.16	1.26	1.24	1.24	1.27	1.33	1.21	1.14	1.08	1.16	1.13	1.12	1.12	
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90% 2019	90th Percent 2019 Calendar Mondays	00-01 10	01-02 8	02-03	9	6	7	12	11	13	18	19	17	20	19	17	20	17	17	20	17	16	16	16	
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90% 2019 2019 2019 2019 2019 2019 2019 2019	90th Percent 2019 Calendar Mindays Tuesdays Tuesdays Werkesdays Thursdays Saturdays Saturdays Saturdays Saturdays Tuesdays Tuesdays Tuesdays Tuesdays Tuesdays Tuesdays Saturdays Tuesdays	10 10 11 10	8 8 8 10 9 111 12 11 12 11 12 12 12 12 14 16 18 160 10.62 10.6	02-03 9 7 8 8 9 13 11 10 02-03 15 10 12 13 15 16 Volume I	9 7 7 7 8 8 11 11 11 12 14 12 14 10 10 12 17 14 19 19 19 19 19 19 19 19 19 19 19 19 19	6 8 7 7 6 7 9 9 9 10 10 14 14 10 04-05 9 9-2	7 7 7 7 7 7 7 8 8 05-06 10 10 16 10 8 9 9	12 10 10 9 9 10 12 06-07 19 14 14 13 13 17	11 11 11 13 12 11 11 11 11 11 11 11 11 15 16 19 14 14 14 15	13 14 14 17 15 13 13 13 13 22 19 21 24 21 14 17	18 17 16 18 17 14 14 14 22 24 22 24 26 18 19 09-10 09-10 09-20 9-20 9-20	19 21 18 17 18 14 16 16 10-11 25 23 28 20 23 24 25 10-11 22.6 23.6	17 21 20 18 18 16 16 16 11-12 22 28 25 22 20 19 11-12 11-19 23.7	20 18 21 17 18 18 19 12-13 29 23 24 21 32 25 25 25 25 25 25 27 28 29 20 21 21 22 23 24 25 26 27 27 28 28 28 28 28 28 28 28 28 28	19 18 17 18 17 20 18 13-14 27 24 27 25 24 26 22 13-14 21.8 22.2	17 18 19 19 18 18 16 19 14-15 30 21 27 23 25 25 23 14-15 19-7	20 19 21 20 19 16 16 16 23 23 23 28 24 27 19 18	17 18 17 17 16 16 16 14 16-17 23 23 24 25 27 20 24 16-17 19.1 21.2	17 18 18 19 19 17 17 17 17 17 17 17 17 17 17 17 17 17	20 18 15 19 18 19 21 21 26 26 26 18 22 25 25 33 18-19 21 21 21 21 22 25 25 25 25 25 26 27 28 29 20 20 20 20 20 20 20 20 20 20	17 17 17 17 18 18 14 14 19-20 26 22 27 22 29 25 18	16 13 14 16 15 16 17 20-21 29 16 20 23 19 23 19 23 19 23 19 20 21 21.1	16 16 13 16 15 16 16 16 16 21-22 20 20 16 19 23 17 25 21-22 18.5 17.7	16 14 12 14 15 15 15 14 22-23 22 23 18 20 22 21 21 21 21 21 22-23	2 2 1 1 1 1 1
90% 2019 2019 2019 2019 2019 2019 2019 2019	90th Percent 2019 Calendar Mondays Toesdays Toesdays Throsdays Throsdays Throsdays Triddys Saturdays Saturdays Saturdays Saturdays Maximum Exp 2019 Calendar Mandays Toesdays Saturdays	10 10 10 11 11 12 12 13 14 14 15 16 16 17 16 16 17 16 17 16 17 16 17 16 17 17	01-02 8 8 8 10 9 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 13 14 16 16 16 16 16 16 16 16 16 16	02-03 9 7 8 8 9 13 11 11 02-03 15 16 Volume I 02-03 10.8 9.8 10.6	9 7 7 7 8 8 11 11 11 11 11 11 12 14 10 12 17 14 14 10 12 17 14 14 19 19 19 19 19 19 19 19 19 19 19 19 19	6 8 7 7 6 7 9 9 10 10 14 10 04-05 7.8 9.8.5	7 7 7 7 7 7 7 8 8 05-06 10 10 16 10 8 9 9	12 10 10 9 9 10 12 06-07 19 14 14 14 13 13 17	11 11 11 13 12 11 11 11 11 11 11 11 15 67-08 13.8 13.8 13.8 13.8 13.8 13.8 13.8	13 14 14 17 15 13 13 13 13 22 19 21 24 21 14 17	18 17 16 18 17 14 14 14 12 22 24 26 18 19 09-10 20.9 20.9 20.9	19 21 18 17 18 14 16 10-11 25 23 28 20 23 24 25 10-11 22.6 23.6 22.5	17 21 20 20 18 18 16 16 16 11-12 22 28 25 22 20 19 11-12 11-12 19.3,7 22.5	20 18 18 17 18 18 19 12-13 29 23 24 21 32 25 25 25 25 25 26 23,6 23,9	19 18 17 18 17 20 18 13-14 27 24 27 25 24 26 22 21.0	17 18 18 19 19 18 18 16 19 21 27 23 25 23 25 23 14-15 21.3 19 14-15 21.3	20 19 21 20 19 16 16 16 23 23 28 24 27 19 18	17 18 17 16 16 16 16 14 16-17 23 23 24 25 27 20 24 16-17 19.1 20.5	17 18 18 19 19 17 17 17 17 17-18 22 24 22 32 21 23 21 23 21 23	20 18 15 19 18 19 21 26 26 26 28 22 25 33 18-19 22.6 22.6 23.6 24.6 25.6 26 26 26 27 28 28 29 29 20 20 20 20 20 20 20 20 20 20	17 17 17 17 18 18 14 14 19-20 26 22 27 22 29 25 18	16 13 14 16 15 16 17 20-21 29 16 20 23 19 23 19 20-21 21.1 15.6 17.0	21-22 20 20 20 20 20 20 20 20 20 20 20 20 2	16 14 15 15 15 14 22-23 22 23 20 22 21 21 21 21 21-25 22-23 17.9 18.0 15.2	2 2 1 1 1 1 1 1 1 1 1 1
90% 2019 2019 2019 2019 2019 2019 2019 2019	90th Percent 2019 Calendar Wordsys, Tuesdays, Weeksedays, Tuesdays, Trisdays, Saturdays Saturday	10 10 10 11 10 11 10 11 11 10 11 11 10 11 11 10 11 11 10 11 11 10 11	8 8 8 10 9 111 112 111 112 12 12 12 12 11 14 16 18 18 18 18 10 10 10 10 10 10 10 10 10 10 10 10 10	02-03 9 7 8 8 9 13 11 11 10 12 13 15 15 15 16 02-03 17 18 19 10 10 10 10 10 10 10 10 10 10	9 7 7 7 8 8 11 11 11 12 14 10 12 17 14 10 12 17 14 19 19 19 19 19 19 19 19 19 19 19 19 19	6 8 7 7 6 7 9 9 9 10 10 14 14 14 14 15 8.8 9.2 8.8	7 7 7 7 7 7 7 7 7 8 8 10 10 10 16 10 8 9 9 9 9 8.5 10 8 10 8.5 10 8 10 8 10 8 10 8 10 8 10 8 10 8 10	12 10 10 9 9 10 12 12 06-07 19 14 14 14 13 13 17 17 15.0 12.1 12.1 12.1	11 11 11 13 12 11 11 11 11 11 11 11 11 15 16 19 14 14 15 15 16 19 11 11 11 11 11 11 11 11 11 11 11 11	13 14 14 17 15 13 13 13 13 22 19 21 21 24 17 08-09 16-4 16-9 16-9 17 18-9	18 17 16 18 17 14 14 14 14 22 24 26 18 19 09-10 20.9 20.8 19.0 21.8	19 21 18 17 18 14 16 16 18-11 25 23 24 20 23 24 25 10-11 22.6 23.6 22.5 19.0	17 21 20 18 18 16 16 16 11-12 22 28 25 22 20 19 11-12 19.9 23.7 22.5 22.1	20 18 21 17 18 18 19 19 12-13 29 23 24 21 32 25 25 25 25 26 23.8 22.6 23.8 22.6 23.9 24.9 25.9 26.9 27.9	19 18 17 18 17 20 18 13-14 27 24 27 25 24 26 22 21.8 21.8 22.2 21.9	17 18 19 19 18 18 16 19 20 14-15 30 21 27 23 25 25 23 21 31-15 21.3 19.7 24.0 20.6	20 19 21 20 19 16 16 16 23 23 23 24 27 19 18 15-16 22.1 21.4 22.1 21.4 22.9	17 18 17 17 16 16 16 14 16-17 23 23 24 25 27 20 24 16-17 19.1 21.2 20.5 20.3	17 18 18 19 19 17 17 17 17 17 17 17 17 17 17 17 17 17	20 18 15 19 18 19 21 26 26 26 26 28 29 25 25 33 18-19 22.6 21.6 18.0 21.0	17 17 17 17 18 18 14 14 26 22 27 22 29 25 18 19-20 20.0 20.0 20.1 21.3 19.8	16 13 14 16 15 16 17 20-21 29 16 20 23 19 23 19 23 19 20-21 21.1 15.6 17.0 19.2	16 16 16 13 16 15 16 16 16 16 20 20 16 19 23 17 25 21-22 18.5 17.7 15.2	16 14 12 14 15 15 14 15 12 22 23 18 20 22 21 21 21 21 21 22 23 17.9 18.0 15.2 16.6	22 1 1 1 1 1 1

Appendix C-8: Combined Response Measure and Time on Task (ToT) Measures of Staffing Requirements

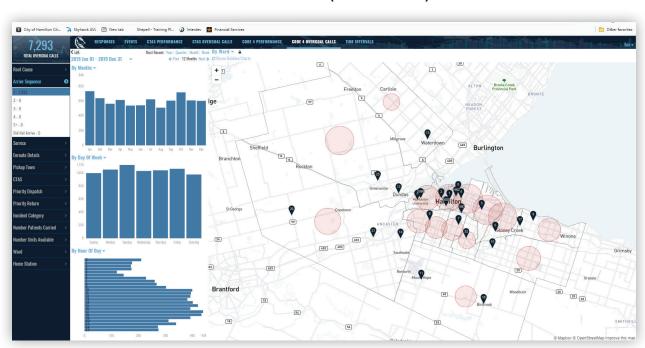
90th Per	rcentile Volum	е																							
4 Volume x	90% Time on Task																								
	2019 Calendar	00-01	81-82	02-03	03-04	84-65	05-06	96-87	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	Mondays	18.8	13.1	15.6	14.7	9.7	10.4	20.9	21.1	25.1	38.5	40.8	42.9	53.5	49.7	43.8	49.9	39.0	38.2	46.4	42.4	36.2	32.2	32.8	22.5
	Tuesdays Wednesdays	20.8	13.3	12.2	12.1	13.0	11.2	16.9	21.4	27.2	37.9	55.1 53.7	66.7	59.5 75.4	62.2 58.7	59.8	60.3	59.7 49.2	51.6 46.0	46.3	50.8	34.5	38.0	34.9 26.0	26.1
	Wednesdays Thursdays	19.5	16.6	15.0	12.2	13.1	10.8	15.2	22.2	31.3	39.5	40.2	47.1	48.2	54.9	53.0	57.0	44.8	45.0	36.3 45.6	39.9	34.8	35.7	29.4	24.7
	Fridays	17.4	19.9	15.3	13.0	10.5	10.8	15.3	23.3	29.8	39.5	44.6	48.6	50.4	52.6	56.5	55.5	42.4	50.0	45.5	49.9	36.7	35.3	32.9	29.7
	Saturdays	27.0	19.8	23.9	18.7	12.2	11.3	17.1	20.0	24.2	29.4	36.0	43.8	50.5	58.7	49.5	46.8	43.1	42.4	44.8	46.7	37.0	36.2	32.1	24.7
	Sundays	25.6	20.7	20.1	18.6	16.2	12.7	19.3	20.0	26.0	28.4	33.5	35.9	46.4	41.9	42.5	39.7	30.6	33.5	43.3	30.4	32.4	31.1	28.0	20.9
95th Per	rcentile Respo	nse Vol	ume																						
Percenile	e Volume x 90% Tin	ne on Tasi	t																						
	2019 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-2
	Mondays	24.7	16.7	19.0	18.2	12.6	13.3	26.0	26.6	31.7	45.0	48.8	50.5	63.9	57.2	55.2	55.2	44.3	46.0	52.7	50.2	48.1	37.4	36.8	27.3
	Tuesdays	27.3	17.8	16.6	16.2	14.9	13.7	20.4	25.2	32.8	46.6	62.0	75.7	74.6	76.7	65.4	68.3	70.2	60.4	55.6	60.0	41.4	42.0	44.8	30.9
	Wednesdays	23.4	22.8	22.0	17.0	15.4	16.0	21.2	27.7	38.8	46.9	67.1	70.3	85.9	72.4	80.4	80.9	59.4	53.2	43.5	52.5	38.5	35.7	32.9	30.1
	Thursdays	21.3	18.9	19.9	15.6	16.5	14.5	19.7	28.2	36.6	48.0	44.8	55.3	59.1	66.9	60.7	65.2	53.5	57.2	50.3	46.5	41.8	39.4	34.8	28.1
	Fridays	21.3	22.7	18.6	15.7	15.6	13.0	19.3	28.0	34.5	48.0	52.8	57.6	66.1	62.7	67.7	65.2	54.6	62.8	51.3	62.7	42.1	42.5	40.7	36.1
	Saturdays Sundays	32.5 30.3	23.7 26.9	27.1 25.8	21.9 21.6	17.5 18.2	13.2 13.9	19.4 23.5	25.2 24.8	26.3 29.8	33.6 34.5	47.7 41.1	48.7 40.8	60.2 54.6	67.2 49.5	60.4 48.3	54.8 45.3	51.8 38.6	49.5 39.8	53.2 50.5	53.6 37.8	43.0 35.3	39.5 38.0	38.4 34.3	28.8
				23.0	21.0	10.2	13.5	25.3	24.0	25.0	34.3	41.1	40.0	34.0	45.3	40.3	40.5	36.0	33.0	30.3	37.0	33.3	30.0	34.3	20.0
Percenile	e Volume x 3rd Qua	artille Timo	on Tasik																						
	2019 Calendar Mondays	00-01 18.5	01-02 13.9	02-03 14.3	03-04 15.1	10.2	10.8	19.9	07-08 20.8	08-09 26.0	09-10 33.9	10-11 36.2	11-12 34.1	12-13 41.7	13-14 39.5	14-15 40.1	15-16 40.5	16-17 33.5	17-18 32.7	18-19 36.7	19-20 32.4	20-21 33.3	21-22 26.7	22-23 25.6	23-2- 19.5
	Tuesdays	20.0	13.5	13.0	12.4	13.1	11.2	16.1	19.7	26.4	35.0	41.8	48.3	45.7	48.7	43.8	43.9	45.1	37.6	36.1	37.4	25.6	29.3	29.3	22.7
	Wednesdays	17.6	16.4	15.9	13.1	12.1	12.8	16.7	21.0	28.8	32.2	43.3	45.2	53.3	45.4	52.3	52.3	40.7	36.2	30.7	37.7	27.2	23.5	23.4	21.7
	Thursdays	16.7	14.9	15.5	12.0	12.8	11.5	15.3	23.1	29.9	35.8	31.8	37.8	40.0	43.8	40.2	44.6	40.5	38.5	34.9	31.9	30.2	27.2	26.0	21.3
	Fridays	17.0	17.5	14.9	12.5	12.1	10.6	15.8	22.3	27.2	34.9	36.5	40.8	44.4	38.6	46.6	45.1	38.2	42.9	33.1	39.8	28.2	28.6	30.0	26.8
	Saturdays Sundays	23.9	19.2 20.2	20.3 18.9	17.1 17.2	13.8 15.2	10.5 11.1	14.5 18.4	20.1 19.7	21.3	26.0 27.6	32.3 30.9	33.7 29.8	39.6 36.1	45.1 37.1	40.1 37.3	37.2 31.4	37.2 29.5	33.8 31.0	38.4 37.0	36.1 28.0	29.8 27.2	26.9 29.0	27.1 26.0	21.0
	.на качу 5	25.4	20.2	10.9	17.2	15.2	11.1	10.4	15.7	22.4	27.0	30.3	23.0	50.1	57.1	37.3	31.4	25.5	31.0	37.0	28.0	27.2	25.0	20.0	19.7
Mavimu	m Volume																								
	0% Time on Task																								
	2019 Calendar	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-2-
	Mondays	30.1	18.1	26.3	22.9	14.5	14.8	33.1	35	43	47	54	56	78	71	78	57	53	49	61	65	66	40	45	31
	Tuesdays	32.2	20.2	17.4	20.7	14.6	16.0	23.6	29	37	54	60	89	76	83	70	73	76	69	67	66	42	47	57	35
	Wednesdays	31.3	24.5	24.8	26.0	18.2	24.4	24.4	32	47	54	84	78	86	93	90	93	69	56	44	66	45	38	39	35
	Thursdays	24.0	20.3	24.4	17.5	18.7	16.3	23.6	35	46	53	47	58	60	76	68	68	66	79	53	52	50	42	42	34
	Fridays	26.1	25.3	25.5	19.5	24.5	12.3	22.1	27	42	60	57	59	90	74	78	79	72	82	63	80	47	54	48	49
	Saturdays Sundays	44.4 31.5	26.4 33.9	27.6 29.2	28.9	24.3 18.0	14.5 14.5	21.8 27.3	25	26 34	38 39	62 52	55 43	70 61	76 51	77 51	56 45	54 52	52 46	59 68	65 39	53 36	39 49	45 42	31 37
						_0.0		_,					-						~			~		_	- 37
maturn x 3r	rd Quartille Time o																								
	2019 Calendar	00-01	81-02	02-03	03-04	84-65	05-06	06-07	07-08	68-69	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	28-21	21-22	22-23	23-2
	Mondays Tuesdays	22.6	15.0 15.3	19.8 13.6	19.0 15.9	11.8	12.1	25.3 18.6	27.1	34.9 29.7	35.6 40.4	40.0	37.7 57.1	50.9 46.5	49.0 52.6	56.3 46.8	42.2	40.4	35.1 42.9	42.2	42.1 41.0	45.7 26.3	28.8 33.1	31.3 37.5	21.9 25.6
	Wednesdays	23.5	17.7	17.9	20.0	14.3	19.6	19.1	24.5	34.8	37.2	40.8 54.0	50.1	53.4	58.5	46.8 58.8	60.1	47.6	38.2	30.7	47.7	32.0	24.8	27.8	25.1
- 1	Thursdays	18.8	16.0	19.1	13.5	14.6	13.0	18.4	28.4	37.9	39.4	33.6	39.3	40.3	49.9	44.9	46.9	49.8	53.4	36.6	35.4	36.2	29.3	31.4	26.0
		20.8	19.6	20.4	15.5	19.0	10.1	18.1	21.7	33.0	43.9	39.4	42.0	60.1	45.7	54.1	54.5	50.1	55.7	40.8	51.0	31.2	36.3	35.6	36.2
	Fridays	20.8											_			51.3									
	Fridays Saturdays	32.7	21.4	20.7	22.5	19.1	11.5	16.2	20.3	21.1	29.3	41.9	37.9	46.1	51.2	51.3	37.8	38.7	35.8	42.5	43.7	36.8	26.2	31.8	22.5

Appendix C-9: Darkhorse Diagnostics – 2018, 2019, 2020 – Actual Performance – Overgoal (>10 minutes) Calls by Ward

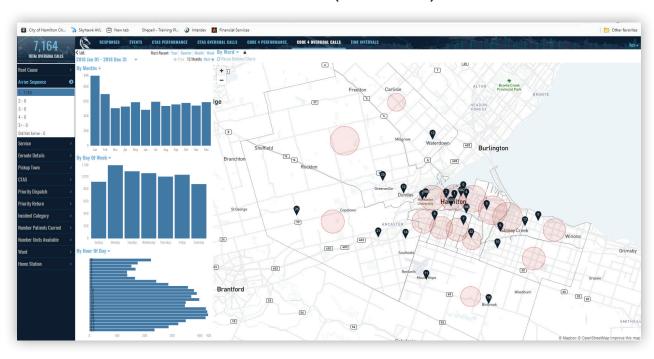
2020 - CODE 4 OVERGOAL (> 10 MINUTES) BY WARD



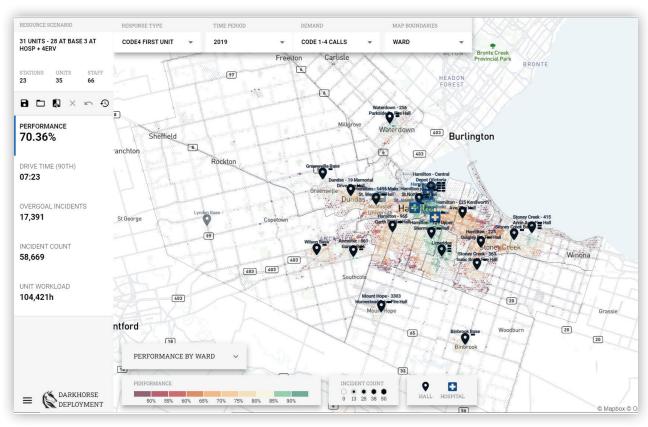
2019 - CODE 4 OVERGOAL (> 10 MINUTES) BY WARD

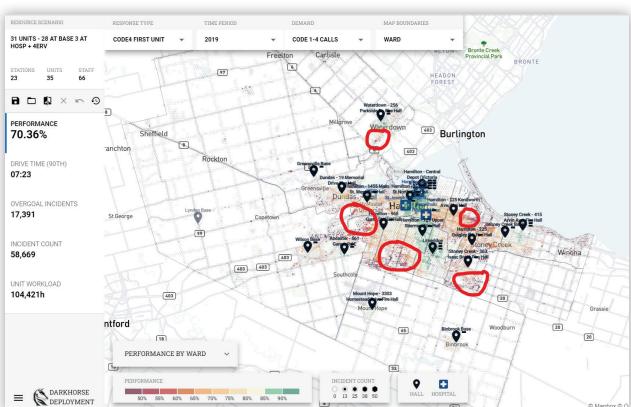


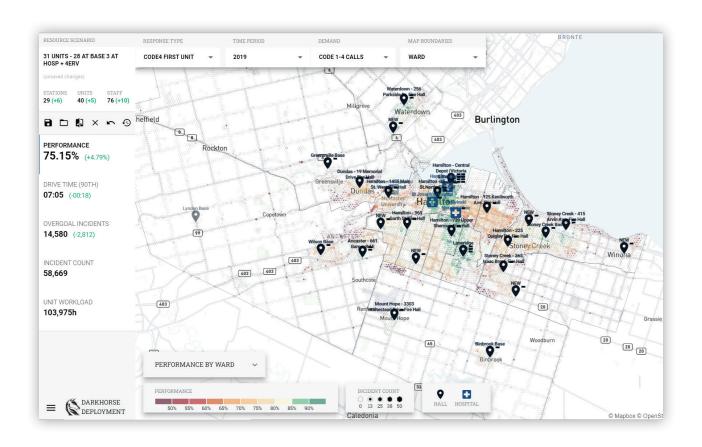
2018 - CODE 4 OVERGOAL (> 10 MINUTES) BY WARD



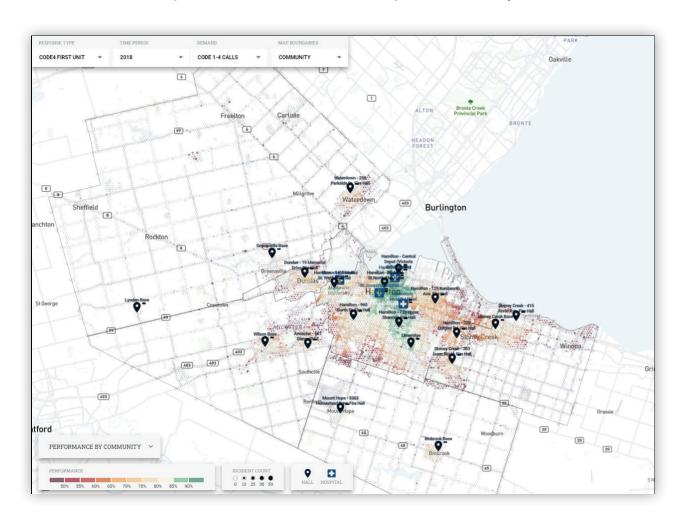
Appendix C-10: Darkhorse Deployment Analyzer - Current Performance, Areas for Improvement, and Projected Performance by Ward

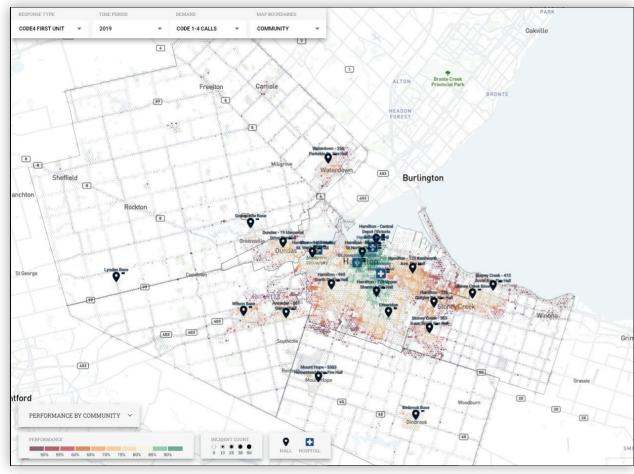


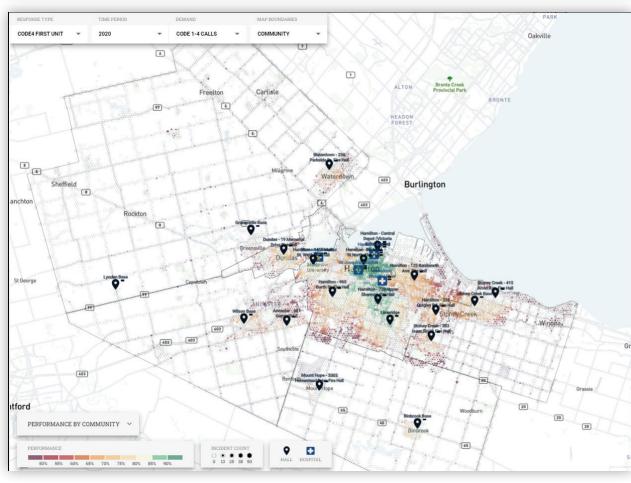




Appendix C-11: Darkhorse Deployment Analyzer
- Changes from 2018, 2019, 2020 as compared to 2031 Projections







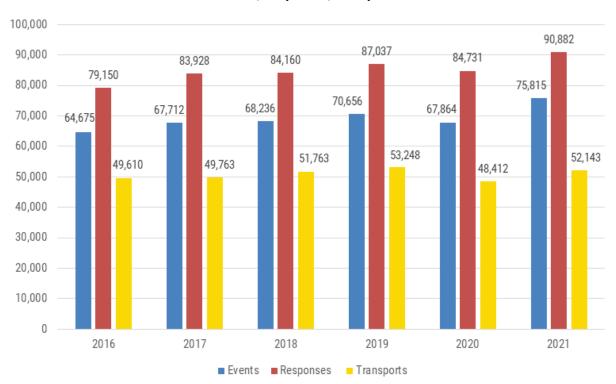
Appendix D: Addendum - 2021 Service Metrics

Since this Master Plan was completed in October 2021, key service metrics have been compiled for the 2021 year that illustrate service levels higher than that in the years prior to the pandemic.

Events, Responses, Transports

Metrics for events, responses and transports in 2021 show that as predicted the demand for service continues to increase at a rate of four percent each year, with the exception of the 2020 when the onset of the pandemic saw a decline in call demand.

Hamilton Paramedic Service Events, Responses, Transports

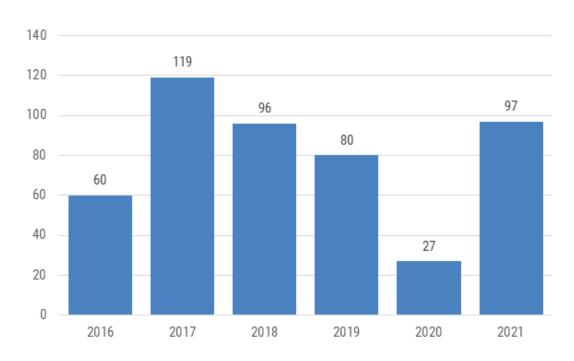


In 2021, HPS had 75,815 events an average of 208 per day and 90,892 responses an average of 249 per day. Both metrics are an increase from the pre-pandemic levels in the years leading up to and including 2019. The total number of transports to hospitals in 2021 was 52,143 or 143 per day on average, down from the pre-pandemic total in 2019 but higher than years prior to 2019.

Code Zero Events

The number of times there was one or fewer ambulances available to respond to an emergency call in 2021 was 97 or an average of 8 per month. This surpasses the pre-pandemic totals in 2018 and 2019.

Hamilton Paramedic Service Code Zero Events



Offload Delays

In total, paramedics spent 32,075 hours in emergency departments waiting to transfer the care of a patient to the hospital. This is more than in previous years with a total of 27, 512 hours in 2018 and 30,549 hours in 2019 spent in offload delay (OLD) for more than 30 minutes.

The frequency of time spent in OLD that last longer than three hours has been increasing since before the pandemic began in 2020.

	Frequency of Offload Delays										
Hours	2018	2021									
1-2	12,127	12,782	9,135	12,105							
2-3	3,018	3,590	2,120	3,584							
3-4	1,058	1,308	772	1,530							
4-5	328	429	205	645							
5-6	103	146	63	223							
6+	46	54	25	126							

This chart shows that the frequency of OLDs longer than the interim target of 60 minutes 90% of the time is increasing to levels higher than before than pandemic. For example, there were 126 OLDs lasting more than 6 hours in 2021 which is more than double the previous largest amount in 2019. Similarly, the frequency of OLDs lasting between three to four, four to five and five to six hours in 2021 surpasses previous years.

Mobile Integrated Health

Community paramedicine programs through the Mobile Integrated Health (MIH) team continued to be busy in 2021:

- 129 clients were immunized against influenza
- 1,145 clients were cared for through the @Home program
- 198 clients were monitored at home remotely
- 908 clients received assistance from Social Navigators
- 23 patients were taken to an addiction management facility rather than to the Emergency Department
- 90 patients received palliative care from paramedics in their homes
- 270 patients received paramedic care at home while they await long-term care placement

Pandemic Response

In addition to the MIH activities listed above, responding to the needs of the community as a result of the COVID-19 pandemic continued in 2021. In collaboration with Hamilton Public Health Services, MIH carried out the following activities:

- 14,319 COVID-19 swabbing tests performed
- 3,994 COVID-19 vaccines administered to homebound patients
- 9,766 identified by paramedics in their care as suspected COVID-19 positive requiring extra measure to mitigate the risk of exposure and transmission
- Paramedics utilized their technology to assist in conducting in-house fit testing for other City of Hamilton divisions (e.g., Public health and Long-Term Care) to ensure respirator masks were the right fit to ensure the proper level of protection

Given the 2021 service metrics demonstrated an expected upward trend in call demand, code zero events and offload delays, and a continued heavy reliance on MIH activities, the objectives of this Master Plan finalized in October 2021 are further supported and as such remained unaltered as a result of the 2021 service metrics.





We are a volunteer-based advisory committee of the City of Hamilton. Members of the committee are residents and/or business owners in Hamilton who are appointed by Council.

SAC is a full partner with the City of Hamilton and the Hamilton Council on Aging in the development, governance and implementation of Hamilton's Age-Friendly Plan.

SAC's active working groups, include:

- Communications
- Elder Abuse
- Housing
- Getting Around Hamilton

SAC also has membership in several external committees/groups.



WHOAppendix 'B' to Emergency and Community Services Committee Report 22-008 We are a volunteer-based advisoru committee SENIORS ADVISORY SENIORS ADVISORY **COMMITTEE** (SAC)

COMMITTEE (SAC)





First Friday of each month 10:00 a.m. to Noon (Schedule subject to change)

LOCATION

Hamilton City Hall 71 Main Street West, 1st Floor, Room 192 (Virtual as necessary)

CONTACT

Lisa Maychak, Staff Liaison (905) 546-2424, ext. 1721 Lisa.Maychak@hamilton.ca





An advisory committee for the City of Hamilton, advocating for improved quality of life for all seniors in Hamilton

An advisory committee for the City of Hamilton, advocating for improved quality of life for all seniors in Hamilton

COMMITTEE MANDATE

SAC shall be a credible communication vehicle regarding the quality of life for all seniors in the City of Hamilton. It will provide a forum for consumers and deliverers of seniors' services and facilities to identify issues, explore possible remedies, and work to implement them.

WHAT WE DO

- Provide a forum to identify seniors' issues, while exploring and recommending solutions.
- Work with City Council and staff to find solutions to seniors' needs.
- Suggest improvements to policies or services offered to seniors by all levels of government.
- Encourage the City to promote healthy ageing through appropriate programs.
- Work for the benefit of a diverse population of seniors across Hamilton, who have various needs.
- Ensure that racialized communities and seniors isolated from the community are kept informed and involved.

SOME PAST ACHIEVEMENTS

- Presentation to Council on "Transportation Options in Underserved Areas of Hamilton."
- Instrumental in introducing the Golden Age
 Pass and Seniors Monthly bus pass.
- Developed the "Housing Options for Older Adults in Hamilton" guide.
- Revision of the seniors' resources landing page on the City of Hamilton website.
- Developed three brochures on home adaptation (for renters, homeowners, property managers) in partnership with various community organizations and Hamilton Public Health Services.



OTHER POTENTIAL PROJECTS

- Develop heat mitigation strategies for older adults.
- Develop workshops on housing options and financial literacy for older adults in collaboration with the Hamilton Council on Aging.
- Advocate for snow removal on all City of Hamilton sidewalks.
- Disseminate information on safety for seniors and elder abuse in partnership with Hamilton Police Services.
- Collaborate with the Hamilton Public Library and the 211 service to ensure optimal dissemination of information relevant to older adults.
- Collaborate with the Hamilton Council on Aging on "Let's Get Moving Workshops," including:
 - · Let's Take a Bus
 - Let's Take a Walk
 - Let's Drive a Car
 - Let's Ride a Bike

YOUR VOICE MATTERS - JOIN US!

- · Learn how you could become a volunteer committee member. · Join monthly meetings.
- Make a presentation at an upcoming meeting on an area of interest that concerns older adults residing in Hamilton.

Council: May 25, 2022

CITY OF HAMILTON

MOTION

MOVED BY COUNCILLOR T. WHITEHEAD......

Road Reconstruction and Installation of Traffic Calming Measures on Garrow Drive from Garth Street to Cranbrook Drive, Hamilton (Ward 14)

WHEREAS, Garrow Drive from Garth Street to Cranbrook Drive in Ward 14 is in need of reconstruction to extend the life of the roadway and therefore improve service levels and reduce maintenance costs; and,

WHEREAS, residents are requesting the installation of speed cushions on Garrow Drive from Garth Street to Cranbrook Drive in Ward 14 to address roadway safety concerns as a result of speeding and cut-through traffic;

THEREFORE, BE IT RESOLVED:

- (a) That Public Works staff be authorized and directed to reconstruct the road and associated concrete works on Garrow Drive from Garth Street to Cranbrook Drive, at an estimated cost of \$1,100,000 to be funded from the Ward 14 Area Rating Reserve Account (#108064). Construction is anticipated to be completed in 2023;
- (b) That Transportation Operations and Maintenance be authorized and directed to install traffic calming measures on the following roadway as part of the 2022 Traffic Calming program:

Garrow Drive from Garth Street to Cranbrook Drive (1 speed cushion).

- (c) That all costs associated with the installation of traffic calming measures at this location be funded from the Ward 14 Area Rating Complete Streets Enhancements Account (#4242109142) at an upset limit, including contingency, not to exceed \$7,000.00
- (c) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

CITY OF HAMILTON MOTION

Council: May 25, 2022

MOVED BY COUNCILLOR B. JOHNSON
SECONDED BY COUNCILLOR
Amendment to the Selection Committee for Agencies, Boards & Committees Terms of Reference
WHEREAS, the Terms of Reference for the Selection Committee for Agencies, Boards and Committees reflects nine members of Council; and
WHEREAS, there are currently eight members of Council appointed to the Selection Committee for Agencies, Boards and Committees.
THEREFORE, BE IT RESOLVED:
That the Terms of Reference for the Selection Committee for Agencies, Boards and Committees be amended to reflect a membership of eight members of Council.
Appendix 'A' – Amended Terms of Reference for the Selection Committee for Agencies, Boards and Committees.

SELECTION COMMITTEE Agencies, Boards & Committees

Authority: Established by resolution of Council

Duration: For the term of Council

Reporting to: City Council

Mandate: To interview and report back to Council on the appointment of

citizen representatives to Agencies, Boards and Committees.

Meeting Schedule:

Call of the Chair

Membership:

Eight Members of Council

CITY OF HAMILTON MOTION

Amendment to the Light Rail Transit Sub-Committee Terms of Reference

WHEREAS, "Committee" means a Standing Committee, Sub-Committee, Selection Committee or an Advisory Committee or Task Force established by Council from time to time and "Quorum" means the number of members required to be present at a meeting to validate the transactions of its business.

WHEREAS, the Procedural By-Law 021-21, A By-Law to Govern the Proceedings of Council and Committees of Council was amended on February 4, 2021 to provide Section 5.4 Quorum (1) The quorum for all Committees shall be a half of the membership rounded up to the nearest whole number.

WHEREAS, the Terms of Reference for the Light Rail Transit Sub-Committee of Council was approved in March 2022 without updating the definition of quorum to align with the Procedural By-Law 021-21 A By-Law to Govern the Proceedings of Council and Committees of Council.

THEREFORE, BE IT RESOLVED:

That the Terms of Reference for the Light Rail Transit Sub-Committee of Council be **amended** by deleting the Voting and Attendance section, as follows:

Voting and Attendance: For purposes of voting, majority means more than half of the Committee members present and voting. A quorum for the purposes of voting shall be 50% plus one (1) of the Sub-Committee members.

CITY OF HAMILTON

MOTION

Council's Request for the City's Tribunals to Consider Adjusting their Meeting Format

WHEREAS, the Council for the City of Hamilton has delegated their authority to Tribunals to make decisions on their behalf;

WHEREAS, the City's Tribunals fall under the *Statutory Powers Procedures Act* and under Section 5.2(1) permits electronic participation for Hearings; and

WHEREAS, the Term Priorities for Council includes Trust and Confidence in Government with a goal to "Provide the public with greater access to City government information and opportunities to become more engaged in decision making processes that impact their community".

THEREFORE BE IT RESOLVED:

- (a) That Council requests that the City's Tribunals consider continuing to provide live streaming of public meetings and to continue to permit electronic participation, in addition to in-person participation, for all the parties, members of the public and the members of the tribunal participating in the Tribunal;
- (b) That a copy of this resolution be forwarded to each of the City's Tribunals; and
- (c) That staff be authorized and directed to provide any required staffing support and technology to support electronic participation at Tribunal meetings, to be funded from the Development Fee Stabilization Reserve for 2022 and referred to the 2023 budget process for future years.

COUNCIL COMMUNICATION UPDATES

May 6, 2022 to May 19, 2022

Council received the following Communication Updates during the time period listed above, the updates are also available to the public at the following link: https://www.hamilton.ca/government-information-updates/information-updates-listing, as per Section 5.18 of By-law 21-021 (A By-law To Govern the Proceedings of Council and Committees of Council) a member of Council may refer any of the items listed below, to a Standing Committee by contacting the Clerk and it will be placed on the next available agenda of the respective Standing Committee.

Date	Department	Subject	Link
May 6, 2022	Healthy and Safe Communities	Encampment Coordination Team Update - April 2022 (City Wide)	https://www.hamilton.ca/sites/default/files/media/browser/ 2022-05-10/comms-update-encampment-coordination- team-april-update.pdf
May 11, 2022	Planning and Economic Development	Residential Infill Good Neighbour Guide (City Wide)	https://www.hamilton.ca/sites/default/files/media/browser/ 2022-05-18/comm-update-residential-infill-good- neighbour-guide.pdf
May 16, 2022	Healthy and Safe Communities	Housing and Homelessness Data Dashboard (City Wide)	https://www.hamilton.ca/sites/default/files/media/browser/ 2022-05-20/comms-update-hsc- housingandhomelessness-dashboard-may2022.pdf
May 16, 2022	Planning and Economic Development	Bike Month and Bike Day Kick-off Information (City Wide)	https://www.hamilton.ca/sites/default/files/media/browser/ 2022-05-19/communication-update-ped-2022-bike-month- bike-day-kick-off-info.pdf
May 19, 2022	Planning and Economic Development	Release of the Commercial E- Scooter Pilot Request for Proposal Documents (City Wide)	https://www.hamilton.ca/sites/default/files/media/browser/ 2022-05-20/commsupdate-escooterrfp.pdf

Authority: Item 5, Public Works Committee

Report 22-008 (PW22032/PED22066)

CM: May 25, 2022 Ward: City Wide

Bill No. 118

CITY OF HAMILTON BY-LAW NO. 22-

To Amend By-law 01-219, a By-law to Manage and Regulate Municipal Parks

WHEREAS this By-law amends By-law No. 01-219.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

- 1. The amendments in this By-law include any necessary grammatical, numbering and lettering changes.
- 2. That section 13 be repealed in its entirety and replaced with the following:
 - 13. While in a park:
 - (1) No person shall be in possession of, consume, serve or sell alcoholic beverages unless authorized by a permit issued by the City and with the approval of the Liquor Licence Board of Ontario.
 - (2) Any person who serves or sells alcoholic beverages in a park pursuant to a permit issued by the City, shall obtain sufficient insurance to conform with current City policy respecting liability insurance, and naming the City as an insured party and shall comply with all other terms and conditions of the permit.
 - (3) No person shall play or bet at or against any game conducted, dealt or carried on with cards, dice or other devices for money, chips, shells, credit or other thing representative or value, or maintain or inhabit any gambling table or other instrument of gambling or gaming; unless otherwise authorized by the Director.
- 3. That in all other respects, By-law 01-219 is confirmed; and
- 4. That the provisions of this by-law shall become effective on the date approved by City Council.

PASSED this 25 th day of May,	2022	
M. Wilson	A. Holland	
Acting Mayor	City Clerk	

Authority: Item 4, General Issues Committee

Report 22-009 (FCS22031)

CM: May 11, 2022 Ward: City Wide

Bill No. 119

CITY OF HAMILTON BY-LAW NO. 22-

To Set Optional Property Classes Within the City of Hamilton for the Year 2022

WHEREAS the property classes have been prescribed by the *Municipal Act, 2001*, S.O. 2001, c. 25, and by the Minister of Finance under Ontario Regulation 282/98; and

WHEREAS Ontario Regulation 282/98 authorizes the Council of the City of Hamilton to adopt optional property classes by by-law.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

- 1. For the 2022 taxation year, the following optional classes as defined in Ontario Regulation 282/98 shall apply in the City of Hamilton:
 - (a) parking lots and vacant land property class; and
 - (b) large industrial property class.
- 2. This By-law is deemed to have come into force on January 1st, 2022.

PASSED this 25th day of May, 20	022.
M. Wilson	A. Holland
Acting Mayor	City Clerk

Authority: Item 4, General Issues Committee

Report 22-009 (FCS22031)

CM: May 11, 2022 Ward: City Wide

Bill No. 120

CITY OF HAMILTON BY-LAW NO. 22-

To Establish Tax Ratios and Tax Reductions for the Year 2022

WHEREAS it is necessary for the Council of the City of Hamilton, pursuant to section 308 of the *Municipal Act, 2001*, S.O. 2001, c. 25, to establish tax ratios for the 2022 taxation year for the City of Hamilton; and

WHEREAS the tax ratios determine the relative amount of taxation to be borne by each property class; and

WHEREAS the property classes have been prescribed by the *Municipal Act, 2001*, S.O. 2001, c. 25, and by the Minister of Finance under Ontario Regulation 282/98; and

WHEREAS it is necessary for the Council of the City of Hamilton, pursuant to section 308 of the *Municipal Act, 2001*, S.O. 2001, c. 25, to establish tax ratios for the 2022 taxation year for the City of Hamilton; and

WHEREAS the tax ratios determine the relative amount of taxation to be borne by each property class; and

WHEREAS the property classes have been prescribed by the *Assessment Act*, R.S.O. 1990, c. A.31 and by the Minister of Finance under Ontario Regulation 282/98; and

WHEREAS tax transition ratios have been prescribed by the Minister of Finance under Ontario Regulation 385/98; and

WHEREAS it is necessary for the Council of the City of Hamilton, pursuant to section 313 of the *Municipal Act*, 2001, S.O. 2001, c. 25, to establish tax rate reductions for prescribed property subclasses for the 2022 taxation year; and

WHEREAS the tax rate reductions applicable to each property subclass reduce the property tax amounts that would otherwise be levied for municipal purposes; and

WHEREAS the property subclasses for which tax rate reductions are to be established are in accordance with subsection 8(1) of the *Assessment Act*, R.S.O. 1990, c. A.31.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

1. This By-law applies to all rateable property within the City of Hamilton.

- 2. For the 2022 taxation year, the tax ratio for property in:
 - (a) the residential property class is 1.0000;
 - (b) the multi-residential property class is 2.3594;
 - (c) the new multi-residential property class is 1.0000;
 - (d) the commercial property class is 1.9800;
 - (e) the parking lots and vacant land property class is 1.9800;
 - (f) the industrial property class is 3.1985;
 - (g) the large industrial property class is 3.7506;
 - (h) the pipeline property class is 1.7947;
 - (i) the farm property class is 0.1767;
 - (j) the managed forest property class is 0.2500
 - (k) the landfill property class is 2.9696.
- 3. For the 2022 taxation year, the tax rate reduction for:
 - (a) the first class of farmland awaiting development in the residential, multiresidential, commercial or industrial property classes is 25%;
 - (b) the second class of farmland awaiting development in the residential, multiresidential, commercial or industrial property classes is 0%;
 - (c) the excess land subclasses in the commercial property class is 0%;
 - (d) the excess land subclasses in the industrial property class is 0%;
 - (e) the vacant land subclass in the industrial property class is 0%;
 - (f) the excess land subclass in the large industrial property class is 0%;
- 4. Lands in a property tax class or subclass referred to in this By-law shall include all lands in said property tax class or subclass as provided for in Ontario Regulation 282/98.

5. This By-law is deemed to come into force as of January 1st, 2022.

PASSED this 25th day of May, 2022.		
M. Wilson	A. Holland	
Acting Mayor	City Clerk	

Authority:

Item 4, General Issues Committee

Report 22-009 (FCS22031)

CM: May 11, 2022 Ward: City Wide

Bill No. 121

CITY OF HAMILTON BY-LAW NO. 22-

To Set and Levy the Rates of Taxation for the Year 2022

WHEREAS the *Municipal Act, 2001*, provides the authority for the Council of the City of Hamilton to levy on the whole rateable property according to the last returned assessment roll for the current year, the tax rates required for Municipal and Education purposes; and

WHEREAS the total taxable assessable property according to the last returned assessment roll is \$82,538,717,896; and

WHEREAS subsection 307(2) of the *Municipal Act, 2001* provides that for each municipal levy, the tax rates to be levied on the different classes of property shall be in the same proportion to each other as the tax ratios established under section 308 of the *Municipal Act* for the property classes are to each other; and

WHEREAS section 312 of the *Municipal Act, 2001* provides for the passing of a by-law which levies a separate tax rate on the rateable assessment in each property class in the local municipality for local municipality purposes to raise the general municipal levy; and

WHEREAS City of Hamilton By-law No. 22-119 establishes optional property classes within the City of Hamilton; and

WHEREAS City of Hamilton By-law No. 22-120 establishes tax ratios and tax reductions for the 2022 taxation year; and

WHEREAS section 15 of the *City of Hamilton Act, 1999* provides for the establishment of one or more municipal service areas and the ability to levy one or more special municipality levies in the municipal service areas for the purpose of raising all or part of its costs for services including public transportation, fire protection and prevention and storm sewer services; and

WHEREAS sections 12 of the *City of Hamilton Act*, 1999 provide for the establishment of merged areas and the taxation within these merged areas for special services and other adjustments to the general municipality levy; and

WHEREAS section 326 of the *Municipal Act, 2001* provides for the identification of special services and for taxation in the form of a special municipal levy for these special services; and

WHEREAS the Education Act provides the tax rates for education purposes.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

- 1. For the purposes of this By-law the Transit/Urban, Recreation, Sidewalk and Streetlight Service Area (Transit/Urban Area) means the area shown on Schedule "E" attached to this By-law.
- 2. For the purposes of this By-law the No Transit/Rural, Recreation, Sidewalk and Streetlight Service Area (No Transit/Rural Area) means the area shown on Schedule "E" attached to this By-law.
- 3. For the purposes of this By-law the Urban Fire Area means the area shown on Schedule "F" attached to this By-law.
- 4. For the purposes of this By-law the Rural Fire Area means the area shown on Schedule "F" attached to this By-law.
- For the purposes of this By-law the Commercial Property Class is comprised of the following Property Classes and related subclasses: Commercial, Office Building, Shopping Centre, Commercial (New Construction), Office Building (New Construction), Shopping Centre (New Construction) Property Class and related subclasses.
- 6. For the purposes of this By-law the Industrial Property Class is comprised of the Industrial Property Class, the Industrial (New Construction) Property Class and related subclasses.
- 7. For the purposes of this By-law the Large Industrial Property Class is comprised of the Large Industrial Property Class, the Large Industrial (New Construction) Property Class and related subclasses.
- 8.
- (a) The sum of \$993,537,728, as set out in Schedule "A" attached to this By-law, is adopted as the amount required for general and special municipal levies for the 2022 taxation year.
- (b) The Council of the City of Hamilton adopts transit, sidewalk snow removal, recreation, sidewalks, streetlights, fire, parkland purchases and special infrastructure re-investment as special services for the 2022 taxation year.
- (c) The levies for Municipal and Education purposes as set out in Schedule "B" attached to this By-law, shall be collected on the rateable property of the City of Hamilton.
- 9. For Municipal and Education purposes the Tax Rates set out in Schedule "C" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the

applicable subclasses for general municipal and education levies as set out therein on the ratable property in the City of Hamilton.

10.

(a) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Transit Tax Rates set out in Schedule "D1" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the applicable subclasses in the Transit/Urban Area and upon roll numbers:

2518902220608500000,

2518902220494050000,

2518902220618000000 and

2518902220716600000

(known respectively as Canada Bread, Country Wide Recycling, Maple Leaf and Sarnia Developments) for Transit purposes as set out therein.

- (b) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Sidewalk Snow Removal Tax Rates set out in Schedule "D2" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the applicable subclasses in the Transit/Urban Area of the former municipality of Ancaster for Sidewalk Snow Removal purposes as set out therein.
- (c) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Urban Recreation Tax Rates set out in Schedule "D3" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the applicable subclasses in the Transit/Urban Area and upon roll numbers:

2518902220608500000,

2518902220494050000.

2518902220618000000 and

2518902220716600000

(known respectively as Canada Bread, Country Wide Recycling, Maple Leaf and Sarnia Developments) for Recreation purposes as set out therein.

(d) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Rural Recreation Tax Rates set out in Schedule "D3" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Commercial Assessment, the

Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the applicable subclasses in the No Transit/Rural Area but not upon roll numbers:

2518902220608500000,

2518902220494050000,

2518902220618000000 and

2518902220716600000

(known respectively as Canada Bread, Country Wide Recycling, Maple Leaf and Sarnia Developments) for Recreation purposes as set out therein.

(e) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Urban Sidewalks and Streetlights Tax Rates set out in Schedule "D4" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the applicable subclasses in the Transit/Urban Area and upon roll numbers:

2518902220608500000.

2518902220494050000.

2518902220618000000 and

2518902220716600000

(known respectively as Canada Bread, Country Wide Recycling, Maple Leaf and Sarnia Developments) for Sidewalks and Streetlights purposes as set out therein.

(f) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Rural Sidewalks and Streetlights Tax Rates set out in Schedule "D4" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfill Assessment and the applicable subclasses in the No Transit/Rural Area but not upon roll numbers: 2518902220608500000.

2518902220494050000,

2518902220618000000 and

2518902220716600000

(known respectively as Canada Bread, Country Wide Recycling, Maple Leaf and Sarnia Developments) for Sidewalks and Streetlights purposes as set out therein.

(g) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Urban Fire Tax Rates set out in Schedule "D5" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfills Assessment and the applicable subclasses in the Urban Fire Area and upon roll numbers:

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251890231012800

251890231016602

251890231016603

251890231016605

251890231016606

251890231016607

251890231016608

251890231016609

251890231016610

251890231017400

251890231018800

251890231029600

for Fire purposes as set out therein.
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- (h) For the purposes of calculating the payment in lieu of taxes for roll numbers 251890231020100 and 25189023103220 subsection 10(g) shall apply.
- (i) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Rural Fire Tax Rates set out in Schedule "D5" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfills Assessment and the applicable subclasses in the Rural Fire Area but not upon roll numbers:

for Fire purposes as set out therein.

- (j) For the purposes of calculating the payment in lieu of taxes for roll numbers 251890231020100 and 25189023103220 subsection 10(i) shall apply.
- (k) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Parkland Purchase Tax Rates set out in Schedule "D6" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large

Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfills Assessment and the applicable subclasses in the former municipalities of Stoney Creek, Hamilton, Ancaster and Dundas for Parkland Purchase purposes as set out therein.

- (I) In addition to the Tax Rates levied on Schedule "C" attached to this By-law the Infrastructure Renewal Tax Rates set out in Schedule "D7" attached to this By-law, shall be levied upon the Residential Assessment, the New Multi-Residential Assessment, the Multi-Residential Assessment, the Commercial Assessment, the Parking Lot and Vacant Land Assessment, the Industrial Assessment, the Large Industrial Assessment, the Pipeline Assessment, the Farm Assessment, the Managed Forest Assessment and the Landfills Assessment and the applicable subclasses in the former municipality of Hamilton for Infrastructure Renewal purposes as set out therein.
- 11. The Treasurer shall collect the amount to be raised by this By-law, together with all other sums on the tax roll in the manner as set forth in the *Assessment Act*, the *Municipal Act, 2001* and any other applicable Acts and the By-laws in force in the City of Hamilton.
- 12. All property taxes and special levies other than those levied by interim levy, shall be paid in two instalments, the first due June 30, 2022 and the second due September 30, 2022, or 21 days after an instalment tax bill is mailed out, whichever is later.
- 13. Pursuant to subsection 342(1)(b) of the *Municipal Act*, 2001 which allows for alternative instalment due dates to spread the payment of taxes more evenly over the year, the final tax levy and any special levies, other than those levied by interim levy, shall be as follows:
 - (i) for those on one of the 12-month pre-authorized automatic bank withdrawal payment plans, shall be paid in 6 equal instalments due on the first working day of each month, July to December, inclusive, or due on the first working day on or after the 15th of each month, July to December, inclusive.
 - (ii) for those on the 10-month pre-authorized automatic bank withdrawal payment plan shall be paid in 5 equal instalments, due on the first working day of each month, July to November, inclusive.

The payment plans set out in subsections (i) and (ii) shall be penalty free for so long as the taxpayer is in good standing with the terms of the plan agreement.

- 14. When payment of any instalment or any part of any instalment of taxes levied by this By-law is in default, penalties and where applicable interest, shall be imposed respectively in accordance with City of Hamilton By-law 13-136 and section 345 of the *Municipal Act, 2001.*
- 15. The Treasurer is authorized and directed to serve personally or to mail or cause to be mailed, notices of the taxes levied by this By-law to the person or persons taxed at the address of the resident or place of business of such person.

- 16. The Treasurer is authorized to accept part payment from time to time on account of any taxes due, or alternatively are authorized to refuse acceptance of any such part payment.
- 17. Schedules "A", "B", "C" "D1", "D2" "D3", "D4", D5", "D6" and "D7", attached to this Bylaw, form part of this By-law.
- 18. This By-law is deemed to have come into force on January 1st, 2022.

PASSED this 25th day of May, 202	22.
M. Wilson	A. Holland
Acting Mayor	City Clerk

CITY OF HAMILTON

BY-LAW NO. 22-121

Schedule "A" Page 1 of 1

2022 OPERATING BUDGET	2022 LEVY
Oite Comices	
City Services	22 472 450
Planning & Economic Development Healthy and Safe Communities	32,473,450 148,270,918
Public Works	235,095,901
Legislative	5,284,590
City Manager	13,652,960
Corporate Services	38,824,160
Outside Boards & Agencies	16,819,520
Library	32,682,010
City Enrichment Fund	6,088,340
Hamilton Entertainment Facilities	2,337,710
Corporate Financials / Capital Financing	73,955,400
Sub-Total Property Tax Levy for City Services	605,484,958
Police Services	183,542,540
Share of Non Program Revenues	(11,882,387)
Total General Municipal Levy	777,145,112
Special Services (Area Rated)	
Transit	70,526,331
Sidewalk Snow	156,690
Parkland Purchase	2,540,185
Fire	95,695,083
Recreation	28,026,052
Sidewalk Levy	2,337,013
Streetlighting	3,682,393
Re-investment for infrastructure renewal	13,428,870
Total Special Municipal Levy (Area Rated)	216,392,616
Total Municipal Property Tax Levy Requirement	993,537,728

Note: Each respective budget includes related Capital Financing

Anomalies in totals due to rounding

2022 TAX RATES AND LEVY - TOTAL TAX LEVY

Property Class		General Levy	Transit Levy	Sidewalk Snow Removal Levy	Recreation Levy	Sidwalks & Streetlights Levy	Fire Levy	Parkland Purchase Levy	Infrastructure Renewal Levy	Education Levy	Total All Levies
Residential	RT	547,228,821	46,556,455	126,130	19,633,758	4,193,470	66,738,083	1,769,804	8,568,618	103,999,016	798,814,156
		, ,		126, 130	, ,	4, 193,470 61	, , , , , , , , , , , , , , , , , , ,	1,769,804	8,308,018		, ,
Farmland Awaiting Development - Com	C1	7,391	339	15	274	01	957	55	-	1,405	10,495
Farmland Awaiting Development - Res	R1	-	4 407	- 4	4 000	-	- 0.700	-	-		-
Farmland Awaiting Development - Multi-Res	M1	28,569	1,487	4	1,060	235	3,700	43	400.040	5,430	40,527
New Multi-Residential	NT	3,234,360	439,485	-	119,537	26,347	415,841	11,551	100,312	614,679	4,962,114
Multi-Residential	MT	53,217,011	6,928,287	569	1,973,704	436,591	6,883,881	186,346	1,545,944	4,286,563	75,458,897
Commercial	CT	74,219,979	7,864,299	11,079	2,713,953	591,588	9,350,137	256,889	1,602,613	40,973,885	137,584,424
- excess land	CU	1,052,834	95,720	130	37,755	8,060	128,685	3,328	18,531	581,228	1,926,271
- small-scale on farm	C7	1,675	17	1	50	8	137	10	-	231	2,129
Commercial - Office Building	DT	2,507,372	344,835	340	93,054	20,598	324,713	9,803	78,498	1,384,220	4,763,433
- excess land	DU	1,993	288	-	74	16	258	7	67	1,100	3,803
Commercial - Parking Lot	GT	1,197,395	167,246	23	44,438	9,837	155,067	4,363	38,438	661,034	2,277,841
- vacant land	CX	3,531,142	324,818	814	130,527	28,775	450,028	11,392	59,661	1,949,402	6,486,558
Commercial - Shopping	ST	22,815,131	2,618,681	3,924	845,767	186,997	2,948,840	81,399	545,421	12,595,322	42,641,483
- excess land	SU	127,564	7,161	13	4,612	993	15,776	192	1,023	70,423	227,757
Commercial (New Construction)	XT	15,383,500	1,159,979	6,140	562,552	122,633	1,919,604	54,197	171,274	8,492,616	27,872,493
 excess land (New Construction) 	XU	379,174	19,351	315	14,045	3,103	48,155	1,479	914	209,327	675,864
- small-scale on farm (New Construction)	X7	1,930	-	-	52	7	131	2	-	266	2,389
Office Building (New Construction)	ΥT	562,303	45,095	197	20,868	4,619	72,820	2,251	6,762	310,425	1,025,340
- excess land (New Construction)	YU	94	4	0	3	1	12	1	-	52	168
Shopping (New Construction)	ZT	7,948,131	714,024	1,523	293,543	64,653	1,020,628	25,912	123,180	4,387,845	14,579,438
- excess land (New Construction)	ZU	203,901	18,423	3	7,567	1,675	26,406	499	3,354	112,565	374,394
Industrial	IT	13,287,625	1,107,617	1,424	476,084	101,531	1,634,963	43,597	200,187	4,540,994	21,394,023
- excess land	IU	231,583	9,311	16	7,839	1,565	28,018	566	773	79,142	358,812
- vacant land	IX	2,970,059	195,349	822	106,967	22,941	378,455	8,108	25,505	1,015,006	4,723,215
- small-scale on farm	17	3,554	84	1	115	22	356	11	-	304	4,446
Industrial - Large	LT	11,415,333	1,257,716	1,861	423,650	93,776	1,478,325	42,581	254,011	3,326,858	18,294,111
- excess land	LU	599,552	70,807	49	22,251	4,925	77,644	2,057	15,117	174,732	967,133
Industrial (New Construction)	JT	2,433,442	177,056	1,229	87,533	18,748	311,847	9,020	28,025	831,619	3,898,519
- excess land (New Construction)	JU	75,095	3,077	69	2,689	573	9,503	268	144	25,663	117,081
- vacant land (New Construction)	JX	-	-	-	-	-	-	-	-	-	-
- small-scale on farm (New Construction)	J7	744	-	-	20	3	51	1	-	64	882
Large Industrial (New Construction)	KT	5,045,788	221,183	-	187,261	41,451	653,447	598	-	1,470,533	7,620,261
- excess land (New Construction)	KU	-	-	-	-	-	-	-	-	-	-
Pipelines	PT	5,101,110	172,600	-	149,625	24,154	445,732	10,373	40,241	3,106,884	9,050,718
Landfills	HT	123,173	5,530	-	4,571	1,012	15,951	400	-	45,338	195,976
Farm	FT	2,167,368	-	-	59,145	8,282	154,053	3,009	246	582,769	2,974,871
Managed Forests	TT	40,418	-	-	1,108	157	2,880	73	9	7,681	52,325
TOTAL		777,145,112	70,526,327	156,690	28,026,052	6,019,406	95,695,083	2,540,185	13,428,870	195,844,622	1,189,382,346

2022 TAX RATES AND LEVY - GENERAL PURPOSES AND SCHOOL (EDUCATION) PURPOSES

Schedule "C" Page 1 of 1

					GENERAL RA	TES AND LEVY						
			Other	Other	Provincially	Provincially			Total Ge	neral		
Property Class		Current Value	General	General	Shared Programs	Shared Programs	Police	Police	Municipal	Municipal	Education	Education
		Assessment	Rate	Levy	Rate	Levy	Rate	Levy	Rate	Levy	Rate	Levy
Residential	RT	67,973,212,828	0.00476978	324,217,390	0.00150260	102,136,471	0.00177827	120,874,959	0.00805065	547,228,820	0.00153000	103,999,016
Farmland Awaiting Development - Com	C1	1,224,000	0.00357734	4,379	0.00112695	1,379	0.00133371	1,632	0.00603799	7,391	0.00114750	1,405
Farmland Awaiting Development - Res	R1	-	0.00357734	-	0.00112695	-	0.00133371	-	0.00603799	-	0.00114750	-
Farmland Awaiting Development - Multi-Res	M1	4,731,600	0.00357734	16,927	0.00112695	5,332	0.00133371	6,311	0.00603799	28,569	0.00114750	5,430
New Multi-Residential	NT	401,751,200	0.00476978	1,916,266	0.00150260	603,671	0.00177827	714,423	0.00805065	3,234,360	0.00153000	614,679
Multi-Residential	MT	2,801,674,900	0.01125382	31,529,554	0.00354523	9,932,587	0.00419566	11,754,871	0.01899471	53,217,011	0.00153000	4,286,563
Commercial	СТ	4,656,123,309	0.00944417	43,973,210	0.00297515	13,852,645	0.00352098	16,394,124	0.01594029	74,219,979	0.00880000	40,973,885
- excess land	CU	66,048,598	0.00944417	623,774	0.00297515	196,504	0.00352098	232,556	0.01594029	1,052,834	0.00880000	581,228
- small-scale on farm	C7	105,100	0.00944417	993	0.00297515	313	0.00352098	370	0.01594029	1,675	0.00220000	231
Commercial - Office Building	DT	157,297,720	0.00944417	1,485,546	0.00297515	467,984	0.00352098	553,842	0.01594029	2,507,372	0.00880000	1,384,220
- excess land	DU	125,000	0.00944417	1,181	0.00297515	372	0.00352098	440	0.01594029	1,993	0.00880000	1,100
Commercial - Parking Lot	GT	75,117,500	0.00944417	709,422	0.00297515	223,486	0.00352098	264,487	0.01594029	1,197,395	0.00880000	661,034
- vacant land	CX	221,523,000	0.00944417	2,092,100	0.00297515	659,063	0.00352098	779,978	0.01594029	3,531,142	0.00880000	1,949,402
Commercial - Shopping	ST	1,431,286,632	0.00944417	13,517,311	0.00297515	4,258,286	0.00352098	5,039,534	0.01594029	22,815,131	0.00880000	12,595,322
- excess land	SU	8,002,594	0.00944417	75,578	0.00297515	23,809	0.00352098	28,177	0.01594029	127,564	0.00880000	70,423
Commercial (New Construction)	XT	965,069,953	0.00944417	9,114,283	0.00297515	2,871,224	0.00352098	3,397,993	0.01594029	15,383,500	0.00880000	8,492,616
- excess land (New Construction)	XU	23,787,168	0.00944417	224,650	0.00297515	70,770	0.00352098	83,754	0.01594029	379,174	0.00880000	209,327
- small-scale on farm (New Construction)	X7	121,100	0.00944417	1,144	0.00297515	360	0.00352098	426	0.01594029	1,930	0.00220000	266
Office Building (New Construction)	YT	35,275,547	0.00944417	333,148	0.00297515	104,950	0.00352098	124,205	0.01594029	562,303	0.00880000	310,425
- excess land (New Construction)	YU	5,900	0.00944417	56	0.00297515	18	0.00352098	21	0.01594029	94	0.00880000	52
Shopping (New Construction)	ZT	498,618,789	0.00944417	4,709,040	0.00297515	1,483,464	0.00352098	1,755,627	0.01594029	7,948,131	0.00880000	4,387,845
- excess land (New Construction)	ZU	12,791,515	0.00944417	120,805	0.00297515	38,057	0.00352098	45,039	0.01594029	203,901	0.00880000	112,565
Industrial	IT	516,022,007	0.01525620	7,872,537	0.00480608	2,480,043	0.00568783	2,935,045	0.02575011	13,287,625	0.00880000	4,540,994
- excess land	IU	8,993,456	0.01525620	137,206	0.00480608	43,223	0.00568783	51,153	0.02575011	231,583	0.00880000	79,142
- vacant land	IX	115,341,600	0.01525620	1,759,675	0.00480608	554,341	0.00568783	656,043	0.02575011	2,970,059	0.00880000	1,015,006
- small-scale on farm	17	138,000	0.01525620	2,105	0.00480608	663	0.00568783	785	0.02575011	3,554	0.00220000	304
Industrial - Large	LT	378,052,096	0.01788975	6,763,258	0.00563571	2,130,593	0.00666967	2,521,483	0.03019513	11,415,333	0.00880000	3,326,858
- excess land	LU	19,855,904	0.01788975	355,217	0.00563571	111,902	0.00666967	132,432	0.03019513	599,552	0.00880000	174,732
Industrial (New Construction)	JT	94,502,200	0.01525620	1,441,745	0.00480608	454,185	0.00568783	537,512	0.02575011	2,433,442	0.00880000	831,619
- excess land (New Construction)	JU	2,916,300	0.01525620	44,492	0.00480608	14,016	0.00568783	16,587	0.02575011	75,095	0.00880000	25,663
 vacant land (New Construction) 	JX	-	0.01525620	-	0.00480608	-	0.00568783	-	0.02575011	-	0.00880000	-
- small-scale on farm (New Construction)	J7	28,900	0.01525620	441	0.00480608	139	0.00568783	164	0.02575011	744	0.00220000	64
Large Industrial (New Construction)	KT	167,106,000	0.01788975	2,989,485	0.00563571	941,761	0.00666967	1,114,542	0.03019513	5,045,788	0.00880000	1,470,533
- excess land (New Construction)	KU	-	0.01788975	-	0.00563571	-	0.00666967	-	0.03019513	-	0.00880000	-
Pipelines	PT	353,055,000	0.00856031	3,022,261	0.00269671	952,087	0.00319146	1,126,762	0.01444848	5,101,110	0.00880000	3,106,884
Landfills	HT	5,152,100	0.01416441	72,976	0.00446214	22,989	0.00528079	27,207	0.02390733	123,173	0.00880000	45,338
Farm	FT	1,523,578,780	0.00084282	1,284,103	0.00026551	404,524	0.00031422	478,740	0.00142255	2,167,368	0.00038250	582,769
Managed Forests	TT	20,081,600	0.00119245	23,946	0.00037565	7,544	0.00044457	8,928	0.00201266	40,418	0.00038250	7,681
TOTAL		82,538,717,896		460,436,203		145,048,755		171,660,154		777,145,112		195,844,622

2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Transit

able 1 - Stoney Creek Property Class		Current Value Assessment URBAN	Transit Rate	Transit Levy
Residential	RT	10,141,834,481	0.00036147	3,666,01
Farmland Awaiting Development - Com	C1	-	0.00027111	-
Farmland Awaiting Development - Res	R1	-	0.00027111	-
Farmland Awaiting Development - Multi-Res	M1	1,472,000	0.00027111	39
New Multi-Residential	NT	24,676,000	0.00036147	8,92
Multi-Residential	MT	179,311,500	0.00085286	152,92
Commercial	СТ	668,501,936	0.00071572	478.46
- excess land	CU	14,551,291	0.00071572	10.41
- small-scale on farm	C7	7,000	0.00071572	,
Commercial - Office Building	DT	613,700	0.00071572	43
- excess land	DU	-	0.00071572	_
Commercial - Parking Lot	GT	792.500	0.00071572	56
- vacant land	CX	35,051,600	0.00071572	25,08
Commercial - Shopping	ST	133,355,622	0.00071572	95,44
- excess land	SU	625,294	0.00071572	44
Commercial (New Construction)	XT	238,421,537	0.00071572	170,64
- excess land (New Construction)	XU	4,451,700	0.00071572	3,18
- small-scale on farm (New Construction)	X7	-	0.00071572	-
Office Building (New Construction)	YT	13,836,200	0.00071572	9,90
- excess land (New Construction)	YU	-	0.00071572	-
Shopping (New Construction)	ZT	134,381,363	0.00071572	96,17
- excess land (New Construction)	ZU	2,412,500	0.00071572	1,72
Industrial	IT	166,130,949	0.00115618	192.07
- excess land	IU	4,763,600	0.00115618	5,50
- vacant land	IX	26,398,000	0.00115618	30,52
- small-scale on farm	17	50,000	0.00115618	5
Industrial - Large	LT	83,440,800	0.00135576	113,12
- excess land	LU	2,409,100	0.00135576	3,26
Industrial (New Construction)	JT	16,612,300	0.00115618	19,20
- excess land (New Construction)	JU	-	0.00115618	-
- vacant land (New Construction)	JX	=	0.00115618	-
- small-scale on farm (New Construction)	J7	-	0.00115618	-
Large Industrial (New Construction)	KT	6,100,000	0.00135576	8,27
- excess land (New Construction)	KU	=	0.00135576	-
Pipelines	PT	-	0.00064874	-
Landfills	HT	5,152,100	0.00107344	5,53
Farm	FT	29,106,080		-
Managed Forests	TT	323,900	-	-
TOTAL		11,934,783,053		5,098,33

Table 2 - Hamilton

Property Class		Current Value Assessment	Transit	Transit	
		URBAN	Rate	Levy	
Residential	RT	31,585,984,009	0.00116357	36,752,396	
Farmland Awaiting Development - Com	C1	-	0.00087267	-	
Farmland Awaiting Development - Res	R1	-	0.00087267	_	
Farmland Awaiting Development - Multi-Res	M1	-	0.00087267	-	
New Multi-Residential	NT	369,774,100	0.00116357	430,25	
Multi-Residential	MT	2,415,326,100	0.00274532	6,630,84	
Commercial	СТ	2,983,645,385	0.00230386	6,873,90	
- excess land	CU	34,499,994	0.00230386	79,48	
- small-scale on farm	C7	-	0.00230386		
Commercial - Office Building	DT	146,142,808	0.00230386	336,69	
- excess land	DU.	125,000	0.00230386	28	
Commercial - Parking Lot	GT	71,561,900	0.00230386	164,86	
- vacant land	CX	111,072,500	0.00230386	255,89	
Commercial - Shopping	ST	1,015,431,323	0.00230386	2,339,41	
- excess land	SU	1,904,900	0.00230386	4,38	
Commercial (New Construction)	XT	318,867,332	0.00230386	734,62	
- excess land (New Construction)	XU	1,701,768	0.00230386	3,92	
- small-scale on farm (New Construction)	X7	-	0.00230386	-,	
Office Building (New Construction)	YT	12,589,200	0.00230386	29.00	
- excess land (New Construction)	YU	-	0.00230386	-	
Shopping (New Construction)	ZT	229,328,057	0.00230386	528,34	
- excess land (New Construction)	ZU	6,245,115	0.00230386	14,38	
Industrial	IT	230,713,183	0.00372168	858,64	
- excess land	IU	890,500	0.00372168	3,31	
- vacant land	IX	29,394,700	0.00372168	109,39	
- small-scale on farm	17	20,004,700	0.00372168	-	
Industrial - Large	LT	249,649,300	0.00436412	1,089,50	
- excess land	LU	14,857,700	0.00436412	64,84	
Industrial (New Construction)	JT	32,298,500	0.00372168	120,20	
- excess land (New Construction)	JU	165,900	0.00372168	61	
- vacant land (New Construction)	JX	-	0.00372168	-	
- small-scale on farm (New Construction)	J7		0.000.2.00		
Large Industrial (New Construction)	KT	_	0.00436412	_	
- excess land (New Construction)	KU	_	0.00436412	-	
Pipelines	PT	82,653,000	0.00208825	172.60	
Landfills	HT	02,000,000	0.00208823	172,00	
Farm	FT	5,133,800	0.000-0004	_	
Managed Forests	TT	134,700	_	_	
TOTAL	11	39,950,090,774	-	57,597,82	

2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Transit

Table 3 - Ancaster

Property Class		Current Value Assessment URBAN	Transit Rate	Transit Levy	
Residential	RT	7,750,322,223	0.00036904	2,860,195	
Farmland Awaiting Development - Com	C1	1,224,000	0.00027678	339	
Farmland Awaiting Development - Res	R1	-	0.00027678	-	
Farmland Awaiting Development - Multi-Res	M1	308,000	0.00027678	85	
New Multi-Residential	NT	-	0.00036904	-	
Multi-Residential	MT	14,829,000	0.00087072	12,912	
Commercial	CT	343,816,598	0.00073070	251,228	
- excess land	CU	4,045,178	0.00073070	2,956	
- small-scale on farm	C7	16,700	0.00073070	12	
Commercial - Office Building	DT	10,541,212	0.00073070	7,702	
- excess land	DU	· -	0.00073070	· -	
Commercial - Parking Lot	GT	704,100	0.00073070	514	
- vacant land	CX	25,269,300	0.00073070	18,464	
Commercial - Shopping	ST	121,777,687	0.00073070	88,983	
- excess land	SU	413,500	0.00073070	302	
Commercial (New Construction)	XT	190,542,205	0.00073070	139,230	
- excess land (New Construction)	XU	9,775,800	0.00073070	7,143	
- small-scale on farm (New Construction)	X7	-	0.00073070	-	
Office Building (New Construction)	YT	6,102,047	0.00073070	4,459	
- excess land (New Construction)	YU	5,900	0.00073070	4	
Shopping (New Construction)	ZT	47,253,948	0.00073070	34,529	
- excess land (New Construction)	ZU	84,500	0.00073070	62	
Industrial	IT	27,352,100	0.00118039	32,286	
- excess land	IU	310,700	0.00118039	367	
- vacant land	IX	15,798,000	0.00118039	18,648	
- small-scale on farm	17	22,400	0.00118039	26	
Industrial - Large	LT	30,484,700	0.00138415	42,195	
- excess land	LU	797,300	0.00138415	1,104	
Industrial (New Construction)	JT	23,608,300	0.00118039	27,867	
- excess land (New Construction)	JU	1,326,800	0.00118039	1,566	
- vacant land (New Construction)	JX	-	0.00118039	-	
- small-scale on farm (New Construction)	J7	-	0.00118039	-	
Large Industrial (New Construction)	KT	-	0.00138415	-	
- excess land (New Construction)	KU	-	0.00138415	-	
Pipelines	PT	_	0.00066232	_	
Landfills	HT	-	0.00109591	_	
Farm	FT	7,919,500	-	_	
Managed Forests	TT	-	-	-	
TOTAL		8,634,651,698		3.553.179	

Table 4 - Dundas

Table 4 - Dundas					
Property Class		Current Value Assessment URBAN	Transit Rate	Transit Levy	
Residential	RT	3,678,128,201	0.00031788	1,169,194	
Farmland Awaiting Development - Com	C1	-	0.00023841	-	
Farmland Awaiting Development - Res	R1	-	0.00023841	-	
Farmland Awaiting Development - Multi-Res	M1	-	0.00023841	-	
New Multi-Residential	NT	241,200	0.00031788	77	
Multi-Residential	MT	145,989,000	0.00075000	109,492	
Commercial	CT	138,973,362	0.00062940	87,469	
- excess land	CU	1,119,766	0.00062940	705	
- small-scale on farm	C7	-	0.00062940	_	
Commercial - Office Building	DT	-	0.00062940	_	
- excess land	DU	-	0.00062940	-	
Commercial - Parking Lot	GT	2,059,000	0.00062940	1,296	
- vacant land	CX	3,636,900	0.00062940	2,289	
Commercial - Shopping	ST	30,048,100	0.00062940	18,912	
- excess land	SU	-	0.00062940	-	
Commercial (New Construction)	XT	20,380,200	0.00062940	12,827	
- excess land (New Construction)	XU	- 11	0.00062940	-	
- small-scale on farm (New Construction)	X7	-	0.00062940	-	
Office Building (New Construction)	ΥT	2,748,100	0.00062940	1,730	
- excess land (New Construction)	YU	-	0.00062940	-	
Shopping (New Construction)	ZT	337,700	0.00062940	213	
- excess land (New Construction)	ZU	-	0.00062940	-	
Industrial	ΙΤ	15,148,431	0.00101673	15,402	
- excess land	IU	60,900	0.00101673	62	
- vacant land	IX	2,651,000	0.00101673	2,695	
- small-scale on farm	17	-	0.00101673	-	
Industrial - Large	LT	-	0.00119224	_	
- excess land	LU	-	0.00119224	_	
Industrial (New Construction)	JT	2,087,000	0.00101673	2,122	
- excess land (New Construction)	JU	-	0.00101673	-	
- vacant land (New Construction)	JX	-	0.00101673	_	
- small-scale on farm (New Construction)	J7	-	0.00101673	_	
Large Industrial (New Construction)	KT	-	0.00119224	_	
- excess land (New Construction)	KU	-	0.00119224	-	
Pipelines	PT	_	0.00057049	-	
Landfills	HT	<u> </u>	0.00097343	-	
Farm	FT	11,400	2.2222.207	_	
Managed Forests	TT	441,500	-	-	
TOTAL		4,044,061,760		1,424,484	

2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Transit

Table 5 - Flamborough Property Class		Current Value Assessment URBAN	Transit Rate	Transit Levy
Residential	RT	4,006,560,887	0.00023748	951,477
Farmland Awaiting Development - Com	C1	-	0.00017811	-
Farmland Awaiting Development - Res	R1	-	0.00017811	-
Farmland Awaiting Development - Multi-Res	M1	-	0.00017811	-
New Multi-Residential	NT	976,000	0.00023748	232
Multi-Residential	MT	39,469,300	0.00056031	22,11
Commercial	CT	163,503,480	0.00047021	76,88
- excess land	CU	2,699,069	0.00047021	1,269
- small-scale on farm	C7	· · · · -	-	-
Commercial - Office Building	DT	=	0.00047021	_
- excess land	DU	=	0.00047021	_
Commercial - Parking Lot	GT	=	0.00047021	_
- vacant land	CX	36,852,000	0.00047021	17,32
Commercial - Shopping	ST	84,320,100	0.00047021	39,64
- excess land	SU	4,301,900	0.00047021	2,02
Commercial (New Construction)	XT	64,604,100	0.00047021	30,37
- excess land (New Construction)	XU	4,210,900	0.00047021	1,98
- small-scale on farm (New Construction)	X7	-	0.00047021	-
Office Building (New Construction)	YT	-	0.00047021	-
- excess land (New Construction)	YU	-	0.00047021	-
Shopping (New Construction)	ZT	36,611,900	0.00047021	17,21
- excess land (New Construction)	ZU	3,245,700	0.00047021	1,52
Industrial	IT	10,806,300	0.00075958	8.20
- excess land	IU	79,600	0.00075958	6
- vacant land	IX	10,750,900	0.00075958	8.16
- small-scale on farm	17	-	-	-
Industrial - Large	LT	14,477,296	0.00089070	12,89
- excess land	LU	1,791,804	0.00089070	1,59
Industrial (New Construction)	JT	8,392,600	0.00075958	6,37
- excess land (New Construction)	JU	909,400	0.00075958	69
- vacant land (New Construction)	JX	-	0.00075958	-
- small-scale on farm (New Construction)	J7	-	0.00075958	-
Large Industrial (New Construction)	KT	74,990,000	0.00089070	66,79
- excess land (New Construction)	KU	-	0.00089070	-
Pipelines	PT	_	0.00042620	-
Landfills	HT	_	0.00070522	-
Farm	FT	3,108,000	-	-
Managed Forests	TT	-	_	_
TOTAL		4,572,661,236		1.266.85

Table 6 - Glanbrook

Property Class		Current Value Assessment URBAN	Transit Rate	Transit Levy	
Residential	RT	2,554,918,972	0.00045292	1,157,178	
Farmland Awaiting Development - Com	C1	-	0.00033969	-	
Farmland Awaiting Development - Res	R1	-	0.00033969	-	
Farmland Awaiting Development - Multi-Res	M1	2,951,600	0.00033969	1,003	
New Multi-Residential	NT	-	0.00045292	-	
Multi-Residential	MT	-	0.00106862	-	
Commercial	СТ	107,444,244	0.00089679	96,354	
- excess land	CU	994,956	0.00089679	892	
- small-scale on farm	C7	4,900	-	-	
Commercial - Office Building	DT	-	0.00089679	-	
- excess land	DU	-	0.00089679	-	
Commercial - Parking Lot	GT	-	0.00089679	-	
- vacant land	CX	6,416,000	0.00089679	5,754	
Commercial - Shopping	ST	40,454,000	0.00089679	36,279	
- excess land	SU	-	0.00089679	-	
Commercial (New Construction)	XT	80,593,200	0.00089679	72,275	
- excess land (New Construction)	XU	3,480,500	0.00089679	3,121	
- small-scale on farm (New Construction)	X7	-	0.00089679	-	
Office Building (New Construction)	YT	-	0.00089679	-	
- excess land (New Construction)	YU	-	0.00089679	-	
Shopping (New Construction)	ZT	41,869,800	0.00089679	37,548	
- excess land (New Construction)	ZU	803,700	0.00089679	721	
Industrial	IT	692,000	0.00144868	1,002	
- excess land	IU	-	0.00144868	-	
- vacant land	IX	17,893,000	0.00144868	25.921	
- small-scale on farm	17	-	-		
Industrial - Large	LT	-	0.00169875	_	
- excess land	LU	-	0.00169875	-	
Industrial (New Construction)	JT	883.800	0.00144868	1.280	
- excess land (New Construction)	JU	139,700	0.00144868	202	
- vacant land (New Construction)	JX	-	0.00144868	_	
- small-scale on farm (New Construction)	J7	-	0.00144868	_	
Large Industrial (New Construction)	KT	86,016,000	0.00169875	146,120	
- excess land (New Construction)	KU	-	0.00169875	-	
Pipelines	PT	_	0.00081286	_	
Landfills	HT	_	0.00001200	-	
Farm	FT	4,994,300	-	_	
Managed Forests	TT	-	_	_	
y		2,950,550,672		1,585,65	

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2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Sidewalk Snow Removal

Table 1 - Ancaster

Table 1 - Ancaster		Current Value	Sidewalk	Sidewalk	
Property Class		Assessment URBAN	Snow Removal Rate	Snow Removal Levy	
Residential	RT	7,750,322,223	0.00001627	126,130	
Farmland Awaiting Development - Com	C1	1,224,000	0.00001221	15	
Farmland Awaiting Development - Res	R1	-	0.00001221		
Farmland Awaiting Development - Multi-Res	M1	308.000	0.00001221	4	
New Multi-Residential	NT	-	0.00001627	-	
Multi-Residential	MT	14,829,000	0.00003840	569	
Commercial	СТ	343,816,598	0.00003222	11,079	
- excess land	CU	4,045,178	0.00003222	130	
- small-scale on farm	C7	16,700	0.00003222	1	
Commercial - Office Building	DT	10,541,212	0.00003222	340	
- excess land	DU	-	0.00003222	-	
Commercial - Parking Lot	GT	704,100	0.00003222	23	
- vacant land	CX	25,269,300	0.00003222	814	
Commercial - Shopping	ST	121,777,687	0.00003222	3,924	
- excess land	SU	413,500	0.00003222	13	
Commercial (New Construction)	XT	190,542,205	0.00003222	6,140	
- excess land (New Construction)	XU	9,775,800	0.00003222	315	
- small-scale on farm (New Construction)	X7	-	0.00003222	-	
Office Building (New Construction)	YT	6,102,047	0.00003222	197	
- excess land (New Construction)	YU	5,900	0.00003222	0	
Shopping (New Construction)	ZT	47,253,948	0.00003222	1,523	
- excess land (New Construction)	ZU	84,500	0.00003222	3	
Industrial	IT	27,352,100	0.00005205	1,424	
- excess land	IU	310,700	0.00005205	16	
- vacant land	IX	15,798,000	0.00005205	822	
- small-scale on farm	17	22,400	0.00005205	1	
Industrial - Large	LT	30,484,700	0.00006104	1,861	
- excess land	LU	797,300	0.00006104	49	
Industrial (New Construction)	JT	23,608,300	0.00005205	1,229	
 excess land (New Construction) 	JU	1,326,800	0.00005205	69	
 vacant land (New Construction) 	JX	-	0.00005205	-	
- small-scale on farm (New Construction)	J7	-	0.00005205	-	
Large Industrial (New Construction)	KT	-	0.00006104	-	
- excess land (New Construction)	KU	-	0.00006104	-	
Pipelines	PT	-	0.00002921	-	
Landfills	HT	-	0.00004833	-	
Farm	FT	7,919,500	-	-	
Managed Forests	TT	-	-	-	
TOTAL		8,634,651,698		156,690	

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2,163,982

2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Recreation

Table 1 - City-wide

Table 1 - City-wide					
Property Class		Current Value Assessment URBAN	Urban Recreation Rate	Urban Recreation Levy	
Residential	RT	59,717,748,773	0.00029878	17,842,377	
Farmland Awaiting Development - Com	C1	1,224,000	0.00022408	274	
Farmland Awaiting Development - Res	R1	-	0.00022408	=	
Farmland Awaiting Development - Multi-Res	M1	4,731,600	0.00022408	1,060	
New Multi-Residential	NT	395,667,300	0.00029878	118,217	
Multi-Residential	MT	2,794,924,900	0.00070494	1,970,248	
Commercial	СТ	4,405,885,005	0.00059158	2,606,439	
- excess land	CU	57,910,254	0.00059158	34,259	
- small-scale on farm	C7	28,600	0.00059158	17	
Commercial - Office Building	DT	157,297,720	0.00059158	93,054	
- excess land	DU	125,000	0.00059158	74	
Commercial - Parking Lot	GT	75,117,500	0.00059158	44,438	
- vacant land	CX	218,298,300	0.00059158	129,141	
Commercial - Shopping	ST	1,425,386,832	0.00059158	843,232	
- excess land	SU	7,245,594	0.00059158	4,286	
Commercial (New Construction)	XT	913,408,574	0.00059158	540,355	
- excess land (New Construction)	XU	23,620,668	0.00059158	13,974	
- small-scale on farm (New Construction)	X7	· · ·	0.00059158	· =	
Office Building (New Construction)	YT	35,275,547	0.00059158	20,868	
- excess land (New Construction)	YU	5,900	0.00059158	3	
Shopping (New Construction)	ZT	489,782,768	0.00059158	289,746	
- excess land (New Construction)	ZU	12,791,515	0.00059158	7,567	
Industrial	IT	450,842,963	0.00095565	430,846	
- excess land	IU	6,105,300	0.00095565	5,835	
- vacant land	IX	102,885,600	0.00095565	98,322	
- small-scale on farm	17	72,400	0.00095565	69	
Industrial - Large	LT	378,052,096	0.00112061	423,650	
- excess land	LU	19,855,904	0.00112061	22,251	
Industrial (New Construction)	JT	83,882,500	0.00095565	80,162	
 excess land (New Construction) 	JU	2,541,800	0.00095565	2,429	
 vacant land (New Construction) 	JX	-	0.00095565	-	
- small-scale on farm (New Construction)	J7	-	0.00095565	-	
Large Industrial (New Construction)	KT	167,106,000	0.00112061	187,261	
 excess land (New Construction) 	KU	-	0.00112061	-	
Pipelines	PT	82,653,000	0.00053622	44,320	
Landfills	HT	5,152,100	0.00088726	4,571	
Farm	FT	50,273,080	0.00005279	2,654	
Managed Forests	TT	900,100	0.00007469	67	
TOTAL		72,086,799,193		25,862,069	

Current Value Assessment RURAL	Rural Recreation Rate	Rural Recreation Levy
8,255,464,055	0.00021699	1,791,381
-	0.00016275	- · · · · -
-	0.00016275	-
-	0.00016275	-
6,083,900	0.00021699	1,320
6,750,000	0.00051197	3,456
250,238,304	0.00042965	107,514
8,138,344	0.00042965	3,497
76,500	0.00042965	33
-	0.00042965	-
-	0.00042965	-
-	0.00042965	-
3,224,700	0.00042965	1,385
5,899,800	0.00042965	2,535
757,000	0.00042965	325
51,661,379	0.00042965	22,196
166,500	0.00042965	72
121,100	0.00042965	52
-	0.00042965	=
-	0.00042965	=
8,836,021	0.00042965	3,796
-	0.00042965	=
65,179,044	0.00069406	45,238
2,888,156	0.00069406	2,005
12,456,000	0.00069406	8,645
65,600	0.00069406	46
-	0.00081386	-
-	0.00081386	-
10,619,700	0.00069406	7,371
374,500	0.00069406	260
-	0.00069406	-
28,900	0.00069406	20
-	0.00081386	-
-	0.00081386	-
270,402,000	0.00038944	105,305
-	0.00064439	=
1,473,305,700	0.00003834	56,491
19,181,500	0.00005425	1,041

10,451,918,703

2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Sidewalks and Streetlighting

Table 1 - City-wide

able 1 - City-wide Property Class		Current Value Assessment URBAN	Urban Sidewalk/Streetlight Rate	Urban Sidewalk/Streetlight Levy
Residential	RT	59,717,748,773	0.00006614	3,949,463
Farmland Awaiting Development - Com	C1	1,224,000	0.00004960	61
Farmland Awaiting Development - Res	R1	-	0.00004960	-
Farmland Awaiting Development - Multi-Res	M1	4,731,600	0.00004960	235
New Multi-Residential	NT	395,667,300	0.00006614	26,168
Multi-Residential	MT	2,794,924,900	0.00015604	436,120
Commercial	СТ	4,405,885,005	0.00013095	576,943
- excess land	CU	57,910,254	0.00013095	7,583
- small-scale on farm	C7	28,600	0.00013095	4
Commercial - Office Building	DT	157,297,720	0.00013095	20,598
- excess land	DU	125,000	0.00013095	16
Commercial - Parking Lot	GT	75,117,500	0.00013095	9,837
- vacant land	CX	218,298,300	0.00013095	28,586
Commercial - Shopping	ST	1,425,386,832	0.00013095	186,652
- excess land	SU	7,245,594	0.00013095	949
Commercial (New Construction)	XT	913,408,574	0.00013095	119,609
 excess land (New Construction) 	XU	23,620,668	0.00013095	3,093
- small-scale on farm (New Construction)	X7	-	0.00013095	-
Office Building (New Construction)	ΥT	35,275,547	0.00013095	4,619
 excess land (New Construction) 	YU	5,900	0.00013095	1
Shopping (New Construction)	ZT	489,782,768	0.00013095	64,136
 excess land (New Construction) 	ZU	12,791,515	0.00013095	1,675
Industrial	IT	450,842,963	0.00021154	95,369
- excess land	IU	6,105,300	0.00021154	1,291
- vacant land	IX	102,885,600	0.00021154	21,764
- small-scale on farm	17	72,400	0.00021154	15
Industrial - Large	LT	378,052,096	0.00024805	93,776
- excess land	LU	19,855,904	0.00024805	4,925
Industrial (New Construction)	JT	83,882,500	0.00021154	17,744
 excess land (New Construction) 	JU	2,541,800	0.00021154	538
 vacant land (New Construction) 	JX	-	0.00021154	-
- small-scale on farm (New Construction)	J7	-	0.00021154	-
Large Industrial (New Construction)	KT	167,106,000	0.00024805	41,451
- excess land (New Construction)	KU	-	0.00024805	-
Pipelines	PT	82,653,000	0.00011869	9,810
Landfills	HT	5,152,100	0.00019640	1,012
Farm	FT	50,273,080	0.00001169	587
Managed Forests	TT	900,100	0.00001653	15
TOTAL		72,086,799,193		5,724,640

Current Value Assessment RURAL	Rural Sidewalk/Streetlight Rate	Rural Sidewalk/Streetlight Levy
8,255,464,055	0.00002956	244,007
-	0.00002217	-
-	0.00002217	-
-	0.00002217	-
6,083,900	0.00002956	180
6,750,000	0.00006974	471
250,238,304	0.00005852	14,645
8,138,344	0.00005852	476
76,500	0.00005852	4
-	0.00005852	-
-	0.00005852	-
-	0.00005852	-
3,224,700	0.00005852	189
5,899,800	0.00005852	345
757,000	0.00005852	44
51,661,379	0.00005852	3,023
166,500	0.00005852	10
121,100	0.00005852	7
-	0.00005852	-
-	0.00005852	-
8,836,021	0.00005852	517
-	0.00005852	-
65,179,044	0.00009454	6,162
2,888,156	0.00009454	273
12,456,000	0.00009454	1,178
65,600	0.00009454	6
-	0.00011086	-
-	0.00011086	-
10,619,700	0.00009454	1,004
374,500	0.00009454	35
-	0.00009454	-
28,900	0.00009454	3
-	0.00011086	-
-	0.00011086	-
270,402,000	0.00005305	14,344
-	0.00008777	-
1,473,305,700	0.00000522	7,695
19,181,500	0.00000739	142
10,451,918,703		294,759

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2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Fire

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Table 1 - City-wide				7	, –			
Property Class		Current Value Assessment URBAN	Urban Fire Rate	Urban Fire Levy		Current Value Assessment RURAL	Rural Fire Rate	Rural Fire Levy
Residential	RT	59,651,107,064	0.00104259	62,191,477		8,322,105,764	0.00054633	4,546,605
Farmland Awaiting Development - Com	C1	1,224,000	0.00078194	957		-	0.00040975	-
Farmland Awaiting Development - Res	R1	-	0.00078194	-		-	0.00040975	-
Farmland Awaiting Development - Multi-Res	M1	4,731,600	0.00078194	3,700		-	0.00040975	-
New Multi-Residential	NT	395,667,300	0.00104259	412,518		6,083,900	0.00054633	3,324
Multi-Residential	MT	2,794,924,900	0.00245988	6,875,180		6,750,000	0.00128901	8,701
Commercial	СТ	4,389,885,105	0.00206432	9,062,139		266,238,204	0.00108173	287,998
- excess land	CU	58,252,354	0.00206432	120,252		7,796,244	0.00108173	8,433
- small-scale on farm	C7	23,700	0.00206432	49		81,400	0.00108173	88
Commercial - Office Building	DT	157,297,720	0.00206432	324,713		-	0.00108173	-
- excess land	DU	125,000	0.00206432	258		-	0.00108173	-
Commercial - Parking Lot	GT	75,117,500	0.00206432	155,067		-	0.00108173	-
- vacant land	CX	214,126,900	0.00206432	442,027		7,396,100	0.00108173	8,001
Commercial - Shopping	ST	1,425,386,832	0.00206432	2,942,458		5,899,800	0.00108173	6,382
- excess land	SU	7,245,594	0.00206432	14,957		757,000	0.00108173	819
Commercial (New Construction)	XT	891,171,374	0.00206432	1,839,665		73,898,579	0.00108173	79,938
- excess land (New Construction)	XU	22,820,668	0.00206432	47,109		966,500	0.00108173	1,045
- small-scale on farm (New Construction)	X7	-	0.00206432	-		121,100	0.00108173	131
Office Building (New Construction)	ΥT	35,275,547	0.00206432	72,820		-	0.00108173	-
- excess land (New Construction)	YU	5,900	0.00206432	12		-	0.00108173	-
Shopping (New Construction)	ZT	489,782,768	0.00206432	1,011,070		8,836,021	0.00108173	9,558
 excess land (New Construction) 	ZU	12,791,515	0.00206432	26,406		-	0.00108173	-
Industrial	IT	461,948,607	0.00333473	1,540,473		54,073,400	0.00174744	94,490
- excess land	IU	7,750,656	0.00333473	25,846		1,242,800	0.00174744	2,172
- vacant land	IX	111,449,600	0.00333473	371,654		3,892,000	0.00174744	6,801
- small-scale on farm	17	72,400	0.00333473	241		65,600	0.00174744	115
Industrial - Large	LT	378,052,096	0.00391037	1,478,325		-	0.00204908	-
- excess land	LU	19,855,904	0.00391037	77,644		-	0.00204908	-
Industrial (New Construction)	JT	92,428,200	0.00333473	308,223		2,074,000	0.00174744	3,624
- excess land (New Construction)	JU	2,776,600	0.00333473	9,259		139,700	0.00174744	244
- vacant land (New Construction)	JX	-	0.00333473	-		-	0.00174744	-
- small-scale on farm (New Construction)	J7	-	0.00333473	-		28,900	0.00174744	51
Large Industrial (New Construction)	KT	167,106,000	0.00391037	653,447		-	0.00204908	-
- excess land (New Construction)	KU	-	0.00391037	-		-	0.00204908	-
Pipelines	PT	111,790,000	0.00187113	209,173		241,265,000	0.00098049	236,559
Landfills	HT	5,152,100	0.00309608	15,951		-	0.00162239	´- `
Farm	FT	79,513,180	0.00018423	14,648		1,444,065,600	0.00009654	139,405
Managed Forests	тт	1,105,700	0.00026065	288		18,975,900	0.00013658	2,592

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2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Parkland Purchase

Table 1 - Stoney Creek

Property Class		Current Value Assessment TOTAL	Parkland Purchase Rate	Parkland Purchase Levy
Residential	RT	10,504,088,481	0.00002615	274,656
Farmland Awaiting Development - Com	C1	-	0.00001961	-
Farmland Awaiting Development - Res	R1	-	0.00001961	-
Farmland Awaiting Development - Multi-Res	M1	1,472,000	0.00001961	29
New Multi-Residential	NT	24,676,000	0.00002615	645
Multi-Residential	MT	179,311,500	0.00006169	11,062
Commercial	CT	686,105,436	0.00005177	35,521
- excess land	CU	15,177,291	0.00005177	786
- small-scale on farm	C7	7,000	0.00005177	0
Commercial - Office Building	DT	613,700	0.00005177	32
- excess land	DU	-	0.00005177	-
Commercial - Parking Lot	GT	792,500	0.00005177	41
- vacant land	CX	35,162,600	0.00005177	1,820
Commercial - Shopping	ST	133,355,622	0.00005177	6,904
- excess land	SU	625,294	0.00005177	32
Commercial (New Construction)	XT	241,793,537	0.00005177	12,518
- excess land (New Construction)	XU	4,451,700	0.00005177	230
- small-scale on farm (New Construction)	X7	39,300	0.00005177	2
Office Building (New Construction)	YT	13,836,200	0.00005177	716
 excess land (New Construction) 	YU	-	0.00005177	-
Shopping (New Construction)	ZT	134,381,363	0.00005177	6,957
 excess land (New Construction) 	ZU	2,412,500	0.00005177	125
Industrial	IT	171,035,349	0.00008363	14,304
- excess land	IU	5,020,700	0.00008363	420
- vacant land	IX	26,398,000	0.00008363	2,208
- small-scale on farm	17	50,000	0.00008363	4
Industrial - Large	LT	83,440,800	0.00009807	8,183
- excess land	LU	2,409,100	0.00009807	236
Industrial (New Construction)	JT	16,612,300	0.00008363	1,389
- excess land (New Construction)	JU	-	0.00008363	-
 vacant land (New Construction) 	JX	-	0.00008363	-
- small-scale on farm (New Construction)	17	10,700	0.00008363	1
Large Industrial (New Construction)	KT	6,100,000	0.00009807	598
- excess land (New Construction)	KU	-	0.00009807	-
Pipelines	PT	19,472,000	0.00004693	914
Landfills	HT	5,152,100	0.00007765	400
Farm	FT	94,528,680	0.00000462	437
Managed Forests	TT	789,100	0.00000654	5
TOTAL		12,409,320,853		381,178

able 2 - Hamilton Property Class		Current Value Assessment TOTAL	Parkland Purchase Rate	Parkland Purchase Levy
Residential	RT	31,585,984,009	0.00002948	931,291
Farmland Awaiting Development - Com	C1	-	0.00002211	-
Farmland Awaiting Development - Res	R1	-	0.00002211	-
Farmland Awaiting Development - Multi-Res	M1	-	0.00002211	-
New Multi-Residential	NT	369,774,100	0.00002948	10,903
Multi-Residential	MT	2,415,326,100	0.00006957	168,023
Commercial	CT	2,983,645,385	0.00005838	174,182
- excess land	CU	34,499,994	0.00005838	2,014
- small-scale on farm	C7	· · -	0.00005838	-
Commercial - Office Building	DT	146,142,808	0.00005838	8,532
- excess land	DU	125,000	0.00005838	,
Commercial - Parking Lot	GT	71,561,900	0.00005838	4,17
- vacant land	CX	111,072,500	0.00005838	6,484
Commercial - Shopping	ST	1,015,431,323	0.00005838	59,28
- excess land	SU	1,904,900	0.00005838	11
Commercial (New Construction)	XT	318,867,332	0.00005838	18,61
- excess land (New Construction)	ΧU	1,701,768	0.00005838	9
- small-scale on farm (New Construction)	X7	-	0.00005838	_
Office Building (New Construction)	YT	12,589,200	0.00005838	73
- excess land (New Construction)	YU	-	0.00005838	-
Shopping (New Construction)	ZT	229,328,057	0.00005838	13,38
- excess land (New Construction)	ZU	6,245,115	0.00005838	36
Industrial	IT	230,713,183	0.00009431	21.758
- excess land	IU	890,500	0.00009431	84
- vacant land	IX	29,394,700	0.00009431	2,77
- small-scale on farm	17	-	0.00009431	, <u>-</u>
Industrial - Large	LT	249,649,300	0.00011059	27,60
- excess land	LU	14,857,700	0.00011059	1,64
Industrial (New Construction)	JT	32,298,500	0.00009431	3,046
- excess land (New Construction)	JU	165,900	0.00009431	1
- vacant land (New Construction)	JX	· -	0.00009431	-
- small-scale on farm (New Construction)	17	_	0.00009431	-
Large Industrial (New Construction)	KT	_	0.00011059	-
- excess land (New Construction)	KU	-	0.00011059	-
Pipelines	PT	82,653,000	0.00005292	4,374
Landfills	HT	52,000,000	0.00003292	7,57
Farm	FT	5,133,800	0.00000730	2
Managed Forests	TT	134,700	0.00000321	_
TOTAL		39,950,090,774	0.00000.01	1,459,53

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2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Parkland Purchase

Table 3 - Ancaster

Property Class		Current Value Assessment TOTAL	Parkland Purchase Rate	Parkland Purchase Levy	
Residential	RT	8,522,546,823	0.00005939	506,141	
Farmland Awaiting Development - Com	C1	1,224,000	0.00004454	55	
Farmland Awaiting Development - Res	R1	-	0.00004454	-	
Farmland Awaiting Development - Multi-Res	M1	308,000	0.00004454	14	
New Multi-Residential	NT	-	0.00005939	-	
Multi-Residential	MT	14,829,000	0.00014012	2,078	
Commercial	CT	365,239,198	0.00011759	42,948	
- excess land	CU	4,140,978	0.00011759	487	
- small-scale on farm	C7	79,600	0.00011759	9	
Commercial - Office Building	DT	10,541,212	0.00011759	1,240	
- excess land	DU	-	0.00011759	-	
Commercial - Parking Lot	GT	704,100	0.00011759	83	
- vacant land	CX	25,269,300	0.00011759	2,971	
Commercial - Shopping	ST	121,777,687	0.00011759	14,320	
- excess land	SU	413,500	0.00011759	49	
Commercial (New Construction)	XT	190,972,905	0.00011759	22,456	
- excess land (New Construction)	XU	9,775,800	0.00011759	1,150	
- small-scale on farm (New Construction)	X7	-	0.00011759	-	
Office Building (New Construction)	YT	6,102,047	0.00011759	718	
- excess land (New Construction)	YU	5,900	0.00011759	1	
Shopping (New Construction)	ZT	47,253,948	0.00011759	5,557	
- excess land (New Construction)	ZU	84,500	0.00011759	10	
Industrial	IT	35,784,200	0.00018995	6,797	
- excess land	IU	310,700	0.00018995	59	
- vacant land	IX	15,798,000	0.00018995	3,001	
- small-scale on farm	17	37,000	0.00018995	7	
Industrial - Large	LT	30,484,700	0.00022275	6,790	
- excess land	LU	797,300	0.00022275	178	
Industrial (New Construction)	JT	23,608,300	0.00018995	4,485	
- excess land (New Construction)	JU	1,326,800	0.00018995	252	
- vacant land (New Construction)	JX	-	0.00018995	-	
- small-scale on farm (New Construction)	17	-	0.00018995	-	
Large Industrial (New Construction)	KT	-	0.00022275	-	
- excess land (New Construction)	KU	-	0.00022275	-	
Pipelines	PT	45,817,000	0.00010658	4,883	
Landfills	HT	-	0.00017636	-	
Farm	FT	242,012,800	0.00001049	2,540	
Managed Forests	TT	4,341,100	0.00001485	64	
TOTAL		9,721,586,398		629,341	

Table 4 - Dundas

Property Class		Current Value Assessment TOTAL	Parkland Purchase Rate	Parkland Purchase Levy
Residential	RT	3,835,557,883	0.00001505	57,716
Farmland Awaiting Development - Com	C1	-	0.00001129	-
Farmland Awaiting Development - Res	R1	-	0.00001129	_
Farmland Awaiting Development - Multi-Res	M1	-	0.00001129	-
New Multi-Residential	NT	241,200	0.00001505	4
Multi-Residential	MT	145,989,000	0.00003550	5,183
Commercial	СТ	142,245,871	0.00002979	4,238
- excess land	CU	1,399,666	0.00002979	42
- small-scale on farm	C7	· · · -	0.00002979	_
Commercial - Office Building	DT	-	0.00002979	_
- excess land	DU	-	0.00002979	_
Commercial - Parking Lot	GT	2,059,000	0.00002979	61
- vacant land	CX	3,884,900	0.00002979	116
Commercial - Shopping	ST	30,048,100	0.00002979	895
- excess land	su	· · ·	0.00002979	_
Commercial (New Construction)	XT	20,380,200	0.00002979	607
- excess land (New Construction)	ΧU	-	0.00002979	-
- small-scale on farm (New Construction)	X7	-	0.00002979	-
Office Building (New Construction)	ΥT	2,748,100	0.00002979	82
- excess land (New Construction)	YU	-	0.00002979	-
Shopping (New Construction)	ZT	337,700	0.00002979	10
- excess land (New Construction)	ZU	-	0.00002979	-
Industrial	IT	15,337,931	0.00004813	738
- excess land	IU	60,900	0.00004813	3
- vacant land	ΙX	2,651,000	0.00004813	128
- small-scale on farm	17	-	0.00004813	_
Industrial - Large	LT	-	0.00005644	-
- excess land	LU	-	0.00005644	-
Industrial (New Construction)	JT	2,087,000	0.00004813	100
- excess land (New Construction)	JU	· · ·	0.00004813	-
- vacant land (New Construction)	JX	-	0.00004813	_
- small-scale on farm (New Construction)	J7	-	0.00004813	_
Large Industrial (New Construction)	KT	-	0.00005644	_
- excess land (New Construction)	KU	-	0.00005644	_
Pipelines	PT	7,479,000	0.00002701	202
Landfills	HT	7,773,000	0.00002701	-
Farm	FT	2,016,100	0.00004409	- 5
Managed Forests	TT	537,800	0.00000200	2
· ·	- ''		0.00000010	_
TOTAL		4,215,061,351		70,13

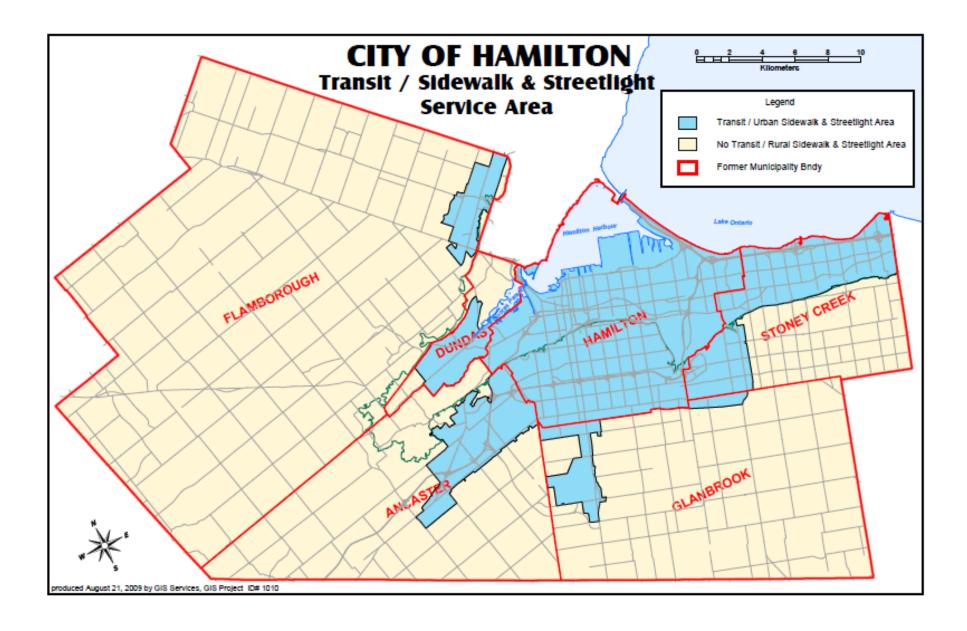
Schedule "D7"

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2022 TAX RATES AND LEVY - SPECIAL MUNICIPAL LEVY: Infrastructure Renewal

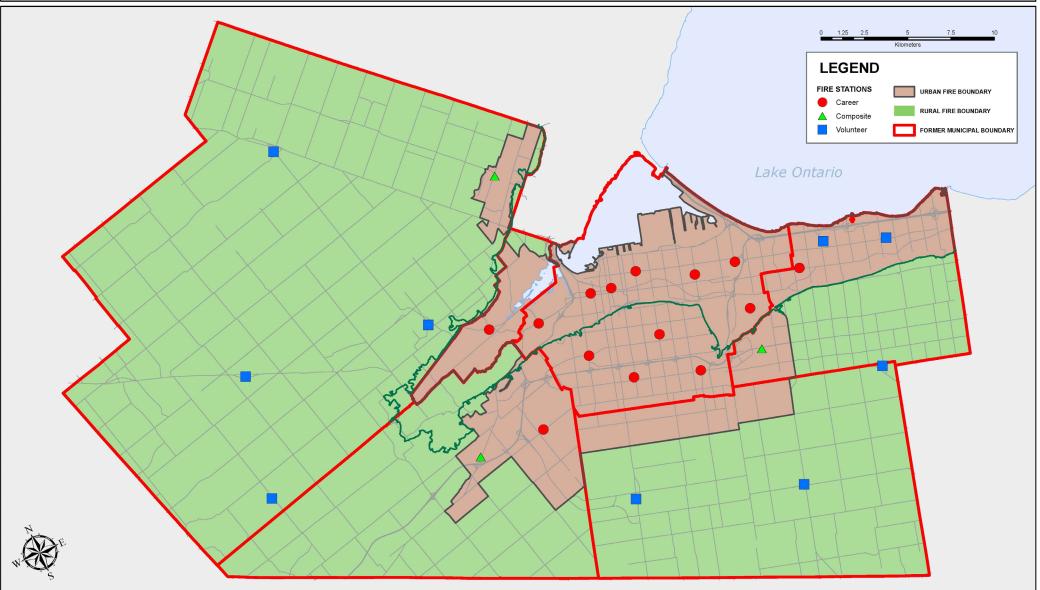
Table 1 - Hamilton

Table 1 - Hamilton			 	
Property Class		Current Value Assessment TOTAL	Infrastructure Renewal Rate	Infrastructure Renewal Levy
Residential	RT	31,585,984,009	0.00027128	8,568,618
Farmland Awaiting Development - Com	C1	-	0.00020346	-
Farmland Awaiting Development - Res	R1	-	0.00020346	-
Farmland Awaiting Development - Multi-Res	M1	-	0.00020346	-
New Multi-Residential	NT	369,774,100	0.00027128	100,312
Multi-Residential	MT	2,415,326,100	0.00064006	1,545,944
Commercial	СТ	2,983,645,385	0.00053713	1,602,613
- excess land	CU	34,499,994	0.00053713	18,531
- small-scale on farm	C7	-	0.00053713	- -
Commercial - Office Building	DT	146,142,808	0.00053713	78,498
- excess land	DU	125,000	0.00053713	67
Commercial - Parking Lot	GT	71,561,900	0.00053713	38,438
- vacant land	CX	111,072,500	0.00053713	59,661
Commercial - Shopping	ST	1,015,431,323	0.00053713	545,421
- excess land	SU	1,904,900	0.00053713	1,023
Commercial (New Construction)	XT	318,867,332	0.00053713	171,274
- excess land (New Construction)	XU	1,701,768	0.00053713	914
- small-scale on farm (New Construction)	X7	-	0.00053713	-
Office Building (New Construction)	YT	12,589,200	0.00053713	6,762
- excess land (New Construction)	YU	-	0.00053713	-
Shopping (New Construction)	ZT	229,328,057	0.00053713	123,180
- excess land (New Construction)	ZU	6,245,115	0.00053713	3,354
Industrial	IT	230,713,183	0.00086769	200,187
- excess land	IU	890,500	0.00086769	773
- vacant land	IX	29,394,700	0.00086769	25,505
- small-scale on farm	17	-	0.00086769	- -
Industrial - Large	LT	249,649,300	0.00101747	254,011
- excess land	LU	14,857,700	0.00101747	15,117
Industrial (New Construction)	JT	32,298,500	0.00086769	28,025
- excess land (New Construction)	JU	165,900	0.00086769	144
- vacant land (New Construction)	JX	-	0.00086769	-
- small-scale on farm (New Construction)	J7	-	0.00086769	-
Large Industrial (New Construction)	KT	-	0.00101747	-
- excess land (New Construction)	KU	-	0.00101747	-
Pipelines	PT	82,653,000	0.00048686	40,241
Landfills	HT	-	0.00080559	-
Farm	FT	5,133,800	0.00004794	246
Managed Forests	TT	134,700	0.00006782	9
TOTAL		39,950,090,774		13,428,870





CITY OF HAMILTON - URBAN / RURAL FIRE AREA RATING



The City of Hamilton accepts no liability for any loss, damage, or inconvenience resulting from the use of, or reliance on, the information contained herein.

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Authority: Item 4, General Issues Committee

Report 22-009 (FCS22031)

CM: May 11, 2022 Ward: City Wide

Bill No. 122

CITY OF HAMILTON BY-LAW NO. 22-

To Levy a Special Charge Upon the Rateable Property in the Business Improvement Areas for the Year 2022

WHEREAS section 208 of the *Municipal Act, 2001*, S.O. 2001, c. 25, authorizes the City of Hamilton to levy a special charge upon the rateable properties in the Business Improvement Areas that are in a prescribed business property class sufficient to raise the amount required for the purposes of the Boards of Management of the Business Improvement Areas; and

WHEREAS City of Hamilton By-law No. 22-119 establishes optional property classes within the City of Hamilton; and

WHEREAS City of Hamilton By-law No. 22-120 establishes tax ratios and tax reductions for the 2022 taxation year; and

WHEREAS the City of Hamilton has created 13 Business Improvement Areas as listed in Schedule "A" attached to this By-law; and

WHEREAS the amount of money to be provided by the City of Hamilton for each of the 11 Business Improvement Areas' Boards of Management with an approved 2022 budget for the 2022 taxation year is set out in Schedule "A" attached to this By-law; and

WHEREAS the total rateable property in each Business Improvement Area, upon which assessment will be levied, is set out in Schedule "A" attached to this By-law and which said assessment is the basis upon which the taxes for the Business Improvement Area will be raised.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

- 1. This By-law applies to all land within the 13 Business Improvement Areas identified in City of Hamilton By-law 14-253. Any reference to Schedule "A" in this By-law means Schedule "A" attached to this By-law.
- 2. Within each Business Improvement Area identified in Schedule "A" the respective tax rate identified in Schedule "A" shall be levied upon the rateable properties for the tax classes and subclasses identified in the Schedule "A" in the Business Improvement Area in which the rateable property is located.
- 3. The Treasurer shall collect the amount to be raised by this By-law, together with all other sums on the tax roll in the manner as set forth in the Assessment Act, the

Municipal Act, 2001 and any other applicable Acts and the By-laws in force in the City of Hamilton.

- 4. The special charge levied by this By-law other than that levied by the interim levy, shall be paid in two instalments, the first due June 30, 2022 and the second due September 30, 2022, or 21 days after an instalment tax bill is mailed out, whichever is later.
- 5. Pursuant to subsection 342(1)(b) of the Municipal Act, 2001, which allows for alternative instalment due dates to spread the payment of taxes more evenly over the year, the final tax levy and any special levies, other than those levied by interim levy, shall be as follows:
 - (i) for those on one of the 12-month pre-authorized automatic bank withdrawal payment plans, shall be paid in 6 equal instalments due on the first working day of each month, July to December, inclusive, or due on the first working day on or after the 15th of each month, July to December, inclusive.
 - (ii) for those on the 10-month pre-authorized automatic bank withdrawal payment plan, paid in 5 equal instalments, due on the first working day of each month, July to November, inclusive.

The payment plans set out in subsections (i) and (ii) shall be penalty free for so long as the taxpayer is in good standing with the terms of the plan agreement.

- When payment of any instalment or any part of any instalment of taxes levied by this By-law is in default, penalties and where applicable interest, shall be imposed respectively in accordance with City of Hamilton By-law 13-136 and section 345 of the Municipal Act, 2001.
- 7. The Treasurer is authorized and directed to serve personally or to mail or cause to be mailed, notices of the taxes levied to the person or persons taxed at the address of the resident or place of business of such person.
- 8. The Treasurer is authorized to accept part payment from time to time on account of any taxes due, or alternatively is authorized to refuse acceptance of any such part payment.
- 9. Schedule "A", attached to this By-law, forms part of this By-law.

10. This By-law is deemed to have com	ne into force on January 1 st , 2022.
PASSED this 25 day of May, 2022.	
M. Wilson	A. Holland
Acting Mayor	City Clerk

Table 1 - Downtown Dundas BIA

Property Class		Current Value	Tax	Weighted		
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial		33,903,228	1.9800	67,128,391	0.5276194%	\$ 178,880
Industrial			3.1985	-	0.8523217%	\$ -
Large Industrial			3.7506	-	0.9994506%	\$ -
Total		\$ 33,903,228		\$ 67,128,391		\$ 178,880
Approved 2022 Levy	\$ 178,880 (divided by weighted a	ssessment) =		0.00266474	tax rate at tax ratio of	1.00

Table 2 - Barton Village

Property Class		Current Value	Tax	Weighted		
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial		34,496,765	1.9800	68,303,595	0.2100693%	\$ 72,467
Industrial		746,400	3.1985	2,387,369	0.3393480%	\$ 2,533
Large Industrial			3.7506	-	0.3979268%	\$ -
Total		\$ 35,243,165		\$ 70,690,964		\$ 75,000
	-	•	-			
Approved 2022 Levy	\$ 75,000 (divided by weighted a	ssessment) =		0.00106096	tax rate at tax ratio of	1.00

Approved 2022 Levy \$ 75,000 (di Use Rateable Assessment * 2/3 assessment reduction as per By-law 98-15

		Gross		Rateable		
*		Assessment	Adjustment	Assessment	Gross Tax	Net Tax
Commercial	030.233.06055	1,035,000	690,000	345,000	2,174	725
Commercial	030.233.06040	7,147,000	4,764,667	2,382,333	15,014	5,005
Commercial	030.237.03410	436,000	290,667	145,333	916	305
Commercial	030.233.06050	3,470,800	2,313,867	1,156,933	7,291	2,430
Industrial	030.233.06050	1,690,200	1,126,800	563,400	5,736	1,912
		13,779,000	9,186,000	4,593,000	31,131	10,377

Table 3 - Consession Street

Property Class		Current Value	Tax	Weighted		
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial		41,966,200	1.9800	83,093,076	0.2834757%	\$ 118,964
Industrial			3.1985	-	0.4579295%	\$ -
Large Industrial			3.7506	-	0.5369779%	\$ -
Total		\$ 41,966,200		\$ 83,093,076		\$ 118,964
Approved 2022 Levy	\$ 118,964 (divided by weighted a	ssessment) =		0.00143170	tax rate at tax ratio of	1.00

Table 4 - Downtown Hamilton

Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
207,064,997	1.9800	409,988,695	0.1931761%	\$ 400,000
	3.1985	-	0.3120586%	\$ -
	3.7506	-	0.3659265%	\$ -
\$ 207,064,997		\$ 409,988,695		\$ 400,000
	207,064,997	207,064,997 1.9800 3.1985 3.7506	207,064,997 1.9800 409,988,695 3.1985 - 3.7506 -	207,064,997

Use Rateable Assessment

* 2/3 assessment reduction as per By-law 92-119

		Gross		Rateable		
*		Assessment	Adjustment	Assessment	Gross Tax	Net Tax
Commercial	020.152.00010	22,530,000	15,020,000	7,510,000	43,523	14,508
Commercial	020.151.50435	1,752,000	1,168,000	584,000	3,384	1,128
Commercial	020.151.50437	312,000	208,000	104,000	603	201
Commercial	020.151.50438	545,000	363,333	181,667	1,053	351
Commercial	020.151.50439	298,000	198,667	99,333	576	192
Commercial	020.151.50440	154,000	102,667	51,333	297	99
Commercial	020.151.50441	793,000	528,667	264,333	1,532	511
Commercial	020.151.50442	1,109,000	739,333	369,667	2,142	714
		27,493,000	18,328,667	9,164,333	53,110	17,703

35,407 Net Adjustment:

Table 5 - Waterdown

Property Class		Current Value	Tax	Weighted		
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial		132,062,449	1.9800	261,483,649	0.1967336%	\$ 259,811
Industrial		59,400	3.1985	189,992	0.3178055%	\$ 189
Large Industrial			3.7506	-	0.3726655%	\$ -
Total		\$ 132,121,849		\$ 261,673,641		\$ 260,000
Approved 2022 Levy	\$ 260,000 (divided by weighted a	assessment) =		0.00099360	tax rate at tax ratio of	1.00

Table 6 - International Village

Property Class		Current Value	Tax	Weighted				
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy		
Commercial		71,563,082	1.9800	141,694,902	0.2504084%	\$ 179,200		
Industrial			3.1985	-	0.4045123%	\$ -		
Large Industrial			3.7506	-	0.4743398%	\$ -		
Total		\$ 71,563,082		\$ 141,694,902		\$ 179,200		
Approved 2022 Levy \$ 179,200 (divided by weighted assessment) = 0.00126469 tax rate at ta						1.00		

Table 7 - King Street West

Property Class		Current Value	Tax	Weighted				
			Assessment	Ratio	Assessment	BIA Tax Rate	BIA I	Levy
Commercial			12,577,900	1.9800	24,904,242	0.0000000%	\$	-
Industrial				3.1985	-	0.0000000%	\$	-
Large Industrial				3.7506	-	0.0000000%	\$	-
Total			\$ 12,577,900		\$ 24,904,242		\$	-
Approved 2022 Levy	\$	 (divided by weighted a 	ssessment) =		-	tax rate at tax ratio of	1.00	

Table 8 - Locke Street

Property Class		Current Value	Tax	Weighted		
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial		36,373,042	1.9800	72,018,623	0.0948505%	\$ 34,500
Industrial			3.1985	_	0.1532224%	\$ -
Large Industrial			3.7506		0.1796719%	\$ -
Total		\$ 36,373,042		\$ 72,018,623		\$ 34,500
	-	•	•			
Approved 2022 Levy	\$ 34,500 (divided by weighted a	ssessment) =		0.00047904	tax rate at tax ratio of	1.00

Table 9 - Main West Esplanade

Property Class	Current Value	Tax	Weighted		
	Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial	25,091,000	1.9800	49,680,180	0.0000000%	\$ -
Industrial		3.1985	-	0.0000000%	\$ -
Large Industrial		3.7506	-	0.0000000%	\$ -
Total	\$ 25,091,000		\$ 49,680,180		\$ -
Approved 2022 Levy \$	 (divided by weighted assessment) = 		-	tax rate at tax ratio of	1.00

Table 10 - Ancaster Heritage Village

Property Class	Current Value	Tax	Weighted						
	Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy				
Commercial	51,714,500	1.9800	102,394,710	0.1899717%	\$ 98,243				
Industrial	719,200	3.1985	2,300,370	0.3068822%	\$ 2,207				
Large Industrial		3.7506	•	0.3598566%	\$ -				
Total	\$ 52,433,700		\$ 104,695,080		\$ 100,450				
Approved 2022 Levy \$ 100,45	(divided by weighted assessment) =		0.00095945	tax rate at tax ratio of	1.00				

Table 11 - Ottawa Street

Property Class		Current Value	Tax	Weighted					
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy			
Commercial		29,619,818	1.9800	58,647,240	0.4490237%	\$ 133,000			
Industrial			3.1985	-	0.7253574%	\$ -			
Large Industrial			3.7506	-	0.8505696%	\$ -			
Total		\$ 29,619,818		\$ 58,647,240		\$ 133,000			
Approved 2022 Levy \$ 133,000 (divided by weighted assessment) = 0.00226780 tax rate at tax ratio of 1.00									

Table 12 - Stoney Creek

Property Class		Current Value	Tax	Weighted		
		Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy
Commercial		18,063,417	1.9800	35,765,566	0.2677561%	\$ 48,366
Industrial		146,600	3.1985	468,902	0.4325359%	\$ 634
Large Industrial			3.7506	-	0.5072009%	\$ -
Total		\$ 18,210,017		\$ 36,234,468		\$ 49,000
				+ + + + + + + + + + + + + + + + + + + +	<u>l</u>	, ,,,,,,,
Approved 2022 Levy	\$ 49,000 (divided by weighted a	assessment) =		0.00135230	tax rate at tax ratio of	1.00

Table 13 - Westdale Village

Property Class	Current Value	Tax	Weighted						
	Assessment	Ratio	Assessment	BIA Tax Rate	BIA Levy				
Commercial	32,851,489	1.9800	65,045,948	0.3805003%	\$ 125,000				
Industrial		3.1985	-	0.6146640%	\$ -				
Large Industrial		3.7506	-	0.7207681%	\$ -				
Total	\$ 32,851,489		\$ 65,045,948		\$ 125,000				
Approved 2022 Levy \$ 125,000 (d	ivided by weighted assessment) =		0.00192172	tax rate at tax ratio of	1.00				

Authority: Item 14, Committee of the Whole

Report 01-003 (FCS01007) CM: February 6, 2001 Ward: 2,3,4,5,8,10,11,15

Bill No. 123

CITY OF HAMILTON

BY-LAW NO. 22-

To Amend By-law No. 01-218, as amended, Being a By-law To Regulate On-Street Parking

WHEREAS Section 11(1)1 of the Municipal Act, S.O. 2001, Chapter 25, as amended, confers upon the councils of all municipalities the power to enact by-laws for regulating parking and traffic on highways subject to the Highway Traffic Act;

AND WHEREAS on the 18th day of September, 2001, the Council of the City of Hamilton enacted By-law No. 01-218 to regulate on-street parking;

AND WHEREAS it is necessary to amend By-law No. 01-218, as amended.

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

1. By-law No. 01-218, as amended, is hereby further amended by adding/deleting from the identified Schedules and Sections noted in the table below as follows:

Schedule	Section	Highway	Side	Location		Duration	Times	Days	Adding/ Deleting
6 - Time Limit	E	Prospect Street South	West	Maplewoo Afton Aver	d Avenue to nue	2 hr	8 am - 5 pm	Mon - Fri	Adding
Schedule	Section	Highway	Si	ide	Location		T	ïmes	Adding/ Deleting
8 - No Parking	D	Airport		North	Homestead	to 37m eas	terly A	Anytime	Deleting
8 - No Parking	D	Airport		South	Homestead westerly	to 29.2m	,	Anytime	Deleting
8 - No Parking	D	Airport Road		North	From 333 fe Homestead feet west of Drive	Drive to 27		Anytime	Deleting

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8 - No Parking	D	Homestead	West	from 34.3m south of Airport to 42.4m southerly	Anytime	Deleting
8 - No Parking	D	Homestead	West	Provident to 9.5m northerly	Anytime	Deleting
8 - No Parking	D	Homestead	East	Provident to 19.3m northerly	Anytime	Deleting
8 - No Parking	D	Provident	North	Homestead to 34.8m westerly	Anytime	Deleting
8 - No Parking	D	Provident	South	Homestead to 24m westerly	Anytime	Deleting
8 - No Parking	D	Aberdeen Avenue	South	Marion Street to westerly end	December 1st to March 31st	Adding
8 - No Parking	D	Airport Road West	North	102 metres west of Homestead Drive to Centre Road	Anytime	Adding
8 - No Parking	D	Airport Road West	South	128 metres west of Homestead Drive to Centre Road	Anytime	Adding
8 - No Parking	D	Avatar Place	West	109 metres east of Stoneglen Way	Anytime	Adding
8 - No Parking	D	Avatar Place	South	Stoneglen Way to northerly limit	December 1st to March 31st	Adding
8 - No Parking	E	Citino Drive	South	36 metres west of West 5th Street to 6 metres east thereof	Anytime	Adding
8 - No Parking	D	Fulmar Way	East	41 metres north of Thames Way to 6 metres north thereof	Anytime	Adding
8 - No Parking	D	Fulmar Way	West	25 metres north of Solsbury Crescent to 6 metres north thereof	Anytime	Adding
8 - No Parking	D	Fulmar Way	East	Thames Way to Provident Way	December 1st to March 31st	Adding
8 - No Parking	E	Glenholme Avenue	East	Lucerne Avenue to 56 metres north thereof	Anytime	Adding
8 - No Parking	D	Hollybank Way	West	31 metres north of Thames Way to 6 metres north thereof	Anytime	Adding
8 - No Parking	D	Hollybank Way	West	Rosebury Way to Provident Way	December 1st to March 31st	Adding
8 - No Parking	D	Homestead Drive	West	from 34 metres south of Airport Road West to 43 meters south thereof	Anytime	Adding
8 - No Parking	D	Homestead Drive	West	132 metres north of Airport Road West to Upper James Street	Anytime	Adding
8 - No Parking	D	Homestead Drive	East	136 metres north of Airport Road West to 260 metres north thereof	Anytime	Adding

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8 - No Parking	D	Homestead Drive	East	430 metres north of Airport Road West to Upper James Street	Anytime	Adding
8 - No Parking	D	Homestead Drive	East	18 metres north of Longview Drive to 139 metres north of Provident Way	Anytime	Adding
8 - No Parking	D	Homestead Drive	West	Strathearne Place to Provident Way	Anytime	Adding
8 - No Parking	С	Humphrey Street	North	McKnight Avenue to Mallard Trail	Anytime	Adding
8 - No Parking	С	Humphrey Street	South	Mallard Trail to easterly end	Anytime	Adding
8 - No Parking	D	Longview Court	South	Marion Street to westerly end	December 1st to March 31st	Adding
8 - No Parking	D	Longview Drive	South	Homestead Drive to Marion Street	December 1st to March 31st	Adding
8 - No Parking	D	Marion Street	West	23 metres north of Woodbrook Court to 11 metres north thereof	Anytime	Adding
8 - No Parking	D	Marion Street	East	Airport Road West to Strathearne Place	December 1st to March 31st	Adding
8 - No Parking	D	Midanbury Way	North	Thames Way to Hollybank Way	December 1st to March 31st	Adding
8 - No Parking	D	Penfold Court	West	Provident Way to northerly end	December 1st to March 31st	Adding
8 - No Parking	E	Prospect Street South	East	Maplewood Avenue to Afton Avenue	Anytime	Adding
8 - No Parking	D	Provident Way	North	Homestead Drive to 13 metres west of Thames Way	Anytime	Adding
8 - No Parking	D	Provident Way	South	Homestead Drive to Thames Way	Anytime	Adding
8 - No Parking	D	Provident Way	South	Thames Way to Fairey Crescent	December 1st to March 31st	Adding
8 - No Parking	D	Rosebury Way	North	Thames Way to Provident Way	December 1st to March 31st	Adding
8 - No Parking	D	Solsbury Crescent	East	27 metres south of Provident Way to 6 metres south thereof	Anytime	Adding
8 - No Parking	D	Solsbury Crescent	East	70 metres south of Provident Way to 29 metres south thereof	Anytime	Adding
8 - No Parking	D	Solsbury Crescent	East & North	Provident Way to Fulmar Way	December 1st to March 31st	Adding
8 - No Parking	D	Spitfire Drive	South	Marion Street to Yale Crescent	December 1st to March 31st	Adding

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				49 metres north of		
8 - No Parking	D	Stoneglen Way	West	Provident Way to 10 metres north thereof	Anytime	Adding
8 - No Parking	D	Stoneglen Way	West & South	144 metres north of Provident Way to 19 metres north and west thereof	Anytime	Adding
8 - No Parking	D	Stoneglen Way	South & East	243 metres north and west of Provident Way to 17 metres west and south thereof	Anytime	Adding
8 - No Parking	D	Stoneglen Way	East	272 metres north, west and south of Provident Way to 9 metres south thereof	Anytime	Adding
8 - No Parking	D	Stoneglen Way	North & West	84 metres east of Malwood Court to 19 metres east and north thereof	Anytime	Adding
8 - No Parking	D	Stoneglen Way	South	36 metres east of Penfold Court to 6 metres east thereof	Anytime	Adding
8 - No Parking	D	Stoneglen Way	South, East, South & West	Penfold Court to Provident Way	December 1st to March 31st	Adding
8 - No Parking	D	Strathearne Place	South	Homestead Drive to westerly end	December 1st to March 31st	Adding
8 - No Parking	D	Thames Way	West	39 metres north of Rosebury Way to 6 metres north thereof	Anytime	Adding
8 - No Parking	D	Thames Way	West	33 metres south of Rosebury Way to 6 metres south thereof	Anytime	Adding
8 - No Parking	D	Thames Way	West & North	63 metres south of Rosebury Way to 23 metres south and west thereof	Anytime	Adding
8 - No Parking	D	Thames Way	South	Fulmar Way to 64 metres west thereof	Anytime	Adding
8 - No Parking	D	Thames Way	East & South	Provident Way to south westerly end	December 1st to March 31st	Adding
8 - No Parking	D	Woodbrook Court	South	Marion Street to westerly end	December 1st to March 31st	Adding
Schedule	Section	Highway	Location	NPA from 8am on 1st day of each month, to 11pm on 15th day of each month AND Dec-Mar	NPA from 8am on 16th day of each month to 11pm on last day of month Apr-Nov	Adding/ Deleting
10 - Alt Side (Apr-Nov)	E	Prospect Street South	Cumberland Avenue to Ma Street East	in East	West	Deleting

Cumberland 10 - Alt Side **Prospect Street** E Avenue to Afton East West Adding (Apr-Nov) South Avenue Maplewood 10 - Alt Side **Prospect Street** Ε Avenue to Main East West Adding (Apr-Nov) South Street East Location Schedule Section Highway Side Times Adding/ Deleting from 75.8m north of Afton to 5.8m 12 - Permit Anytime Deleting Ε **Prospect** East northerly 70m north of Cannon St. to 6.5m 12 - Permit Ε Elgin St. West Anytime Deleting northerly 14 metres north of Hope Avenue to Harmony 12 - Permit Ε East Anytime Adding 6 metres north thereof **Avenue** Harmony 14 metres north of Hope Avenue to 12 - Permit E West Anytime Adding Avenue 6 metres north thereof Location Times Schedule Section **Highway** Side Adding/ Deleting 13 - No Homestead Drive to D **Airport Road** North **Anytime** Deleting Stopping 101.5m westerly From 468m north of 13 - No D Homestead East Airport Road to 34m Anytime Deleting Stopping northerly 13 - No 8:30 a.m. to 4:30 p.m. F Both Bonita Drive to Gray Road Deleting **Jasper Drive** Monday to Friday Stopping from 36.2m east of 13 - No Ε North Glenholme to 98.8m Anytime Deleting Lucerne Stopping easterly 13 - No **Stoney Brook** King Street East to Teak 8:30 a.m. to 4:30 p.m. F Both Deleting Street Stopping **Drive** Monday to Friday 13 - No **Airport Road** Homestead Drive to 102m D North Anytime Adding West west thereof Stopping 13 - No **Dundas Street** First Street to Burke C North Anytime Adding **East** Street Stopping 13 - No 8:00 a.m. to 4:00 p.m. F Both Bonita Drive to Gray Road **Jasper Drive** Adding Monday to Friday Stopping 61 metres east of 13 - No Lucerne Ε Glenholme Avenue to 74 North Anytime Adding Stopping Avenue metres east thereof 13 - No Airport Road West to 29 **Marion Street** Both Adding D Anytime metres south thereof Stopping 13 - No **Stoney Brook** King Street East to Teak 8:00 a.m. to 4:00 p.m. F Both Adding Stopping Drive Street Monday to Friday 13 - No Strathearne Homestead Drive to 20 Both D Anytime Adding

metres west thereof

Stopping

Place

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Schedule	Section	on Highway	Side	Locatio	on	Times	Adding/ Deleting
20 - School Bus LZ	E	Caledon	West	205 feet	commencing at the extended south curb line of Lotus	7:00 a.m 6:00 p.m. Monday to Saturday	Deleting
20 - School Bus LZ	Е	Glenholme	East		om north of Lucerne northerly	Anytime	Deleting
20 - School Bus LZ	Е	Lucerne Avenue	North		ne Avenue to 61 ast thereof	7:00 a.m. to 6:00 p.m. Monday to Saturday	Adding

- 2. Subject to the amendments made in this By-law, in all other respects, By-law No. 01-218, including all Schedules thereto, as amended, is hereby confirmed unchanged.
- 3. This By-law shall come into force and take effect on the date of its passing and enactment.

PASSED this 25th day of May, 2022.

M. Wilson	A. Holland	A. Holland
Acting Mayor	City Clerk	City Clerk

CITY OF HAMILTON

BY-LAW NO. 22-

To Confirm the Proceedings of City Council at its meeting held on May 25, 2022.

THE COUNCIL OF THE CITY OF HAMILTON ENACTS AS FOLLOWS:

1. The Action of City Council at its meeting held on the 25th day of May 2022, in respect of each recommendation contained in

Public Works Committee Report 22-008 – May 16, 2022,
Planning Committee Report 22-008 – May 17, 2022
General Issues Committee Report 22-010 – May 18, 2022,
Audit, Finance & Administration Committee Report 22-010 – May 19, 2022,
and
Emergency & Community Services Committee Report 22-008 – May 19, 2022

considered by City of Hamilton Council at the said meeting, and in respect of each motion, resolution and other action passed and taken by the City Council at its said meeting is hereby adopted, ratified and confirmed.

2. The Mayor of the City of Hamilton and the proper officials of the City of Hamilton are hereby authorized and directed to do all things necessary to give effect to the said action or to obtain approvals where required, and except where otherwise provided, the Mayor and the City Clerk are hereby directed to execute all documents necessary in that behalf, and the City Clerk is hereby authorized and directed to affix the Corporate Seal of the Corporation to all such documents.

PASSED this 25th day of May, 2022.

M. Wilson	A. Holland	
Acting Mayor	City Clerk	