



# HAMILTON PARAMEDIC SERVICE MASTER PLAN (2022-2031)



Emergency and Community Services Committee

May 19, 2022

# Paramedic Services



In-home Care



Community Health and Safety



Transport to Health Care Facilities



Pre-hospital Advanced Medical and Trauma Care

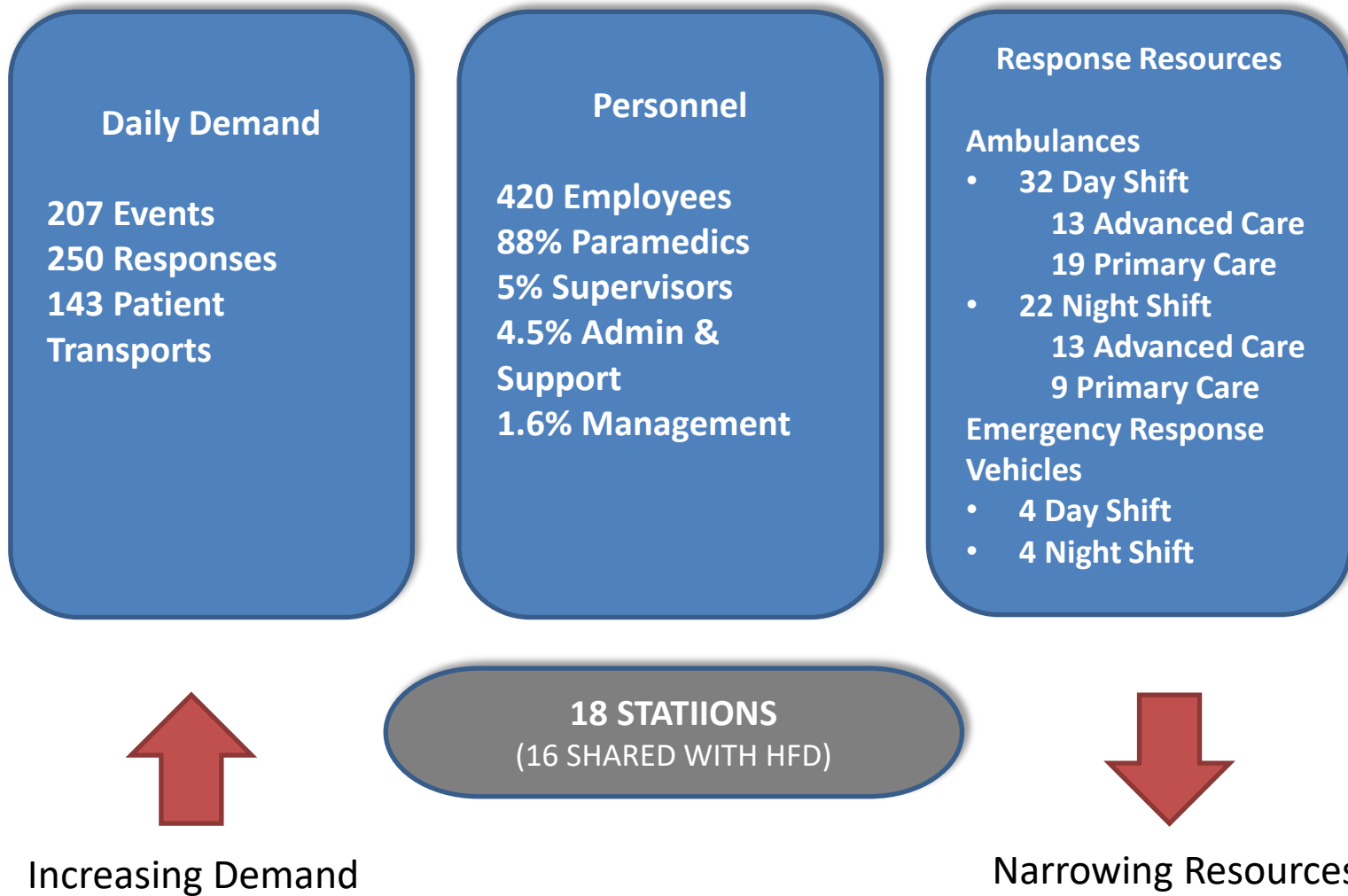


Health Care Crisis Response



Public Education

# Current State

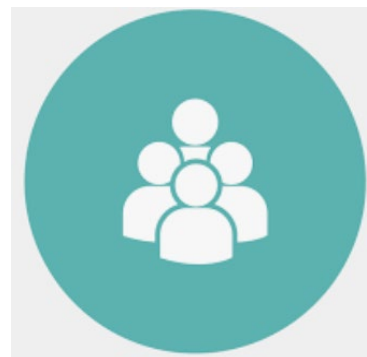


*Failure to Plan is Planning to Fail*

# Why a Master Plan?



Facilities & Infrastructure



Human Resources



Modernization & Transformation



Capacity

# Developing the Master Plan



## COMMUNITY ENGAGEMENT & PARTICIPATION



### Resident Survey (2018)\*

827 responses (phone and online)

Service Expectations:

- Response time performance:  
urgent  $\geq 11$ min, emergency  $< 10$ min
- Prearrival guidance
- Transport to the right place
- Ambulance not held in off load  
delay



### Stakeholder Consultations (2019)

30 in-person consultations

Focus Areas for Master Plan:

- Proactive coordinated care (via  
community paramedicine)
- Alternate care pathway
- Mental health and addiction
- Collaborative response
- Integrated systems

\*Resident engagement to continue as Master Plan work progresses

# Master Plan Priorities

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	Enhanced Logistics	Reduced Offload Delays	People-Focused Culture	Broadened Scope of Practice
Integrated Patient Records	Sufficient Facilities	Increased Cultural Competency		Specialized Services
	Advanced IT	Increased Virtual Care		Contingency Response Preparedness
				Reduced Carbon Footprint

# Key Objectives

## HEALTHY & SAFE COMMUNITIES

Increase the capacity of Mobile Integrated Health (MIH) to address growing demands for at-home support:

- Ensure integration of MIH and frontline paramedic activities with the work of the Greater Hamilton Health Network
- Advocate for additional community paramedics
- Require a lead the Cardiac Safe City program

Advocate for sustained MOH funding of MIH to become a permanent component of primary care in Ontario



# Key Objectives

## HEALTHY & SAFE COMMUNITIES

Broaden paramedics' scope of practice:

- Support Primary Care Paramedics (PCPs) in becoming certified in PCP Autonomous Intravenous (PCP AIV)
- Support PCPs in becoming certified to access and administer a wider range of medication
- Train all paramedics on International Trauma Life Support



Develop a framework for the delivery of specialized services such as tactical, high angle rescue, marine unit, public order unit, special events

Acquire an emergency response utility vehicle through reallocation of vehicle capital to service events where the congregation of people inhibits access by an ambulance



Source: Andrew Collins via Twitter





## Managing Increasing Demands

Establish a central clinical hub with a clinician in dispatch

Operational responsibility of Hamilton's land ambulance dispatch

Mobile Integrated Health (MIH) development and advocacy

Reduce offload delay hours

Clinical level expansion

Alternate care pathways



# Key Objectives



## HEALTHY & SAFE COMMUNITIES

### Current Demands

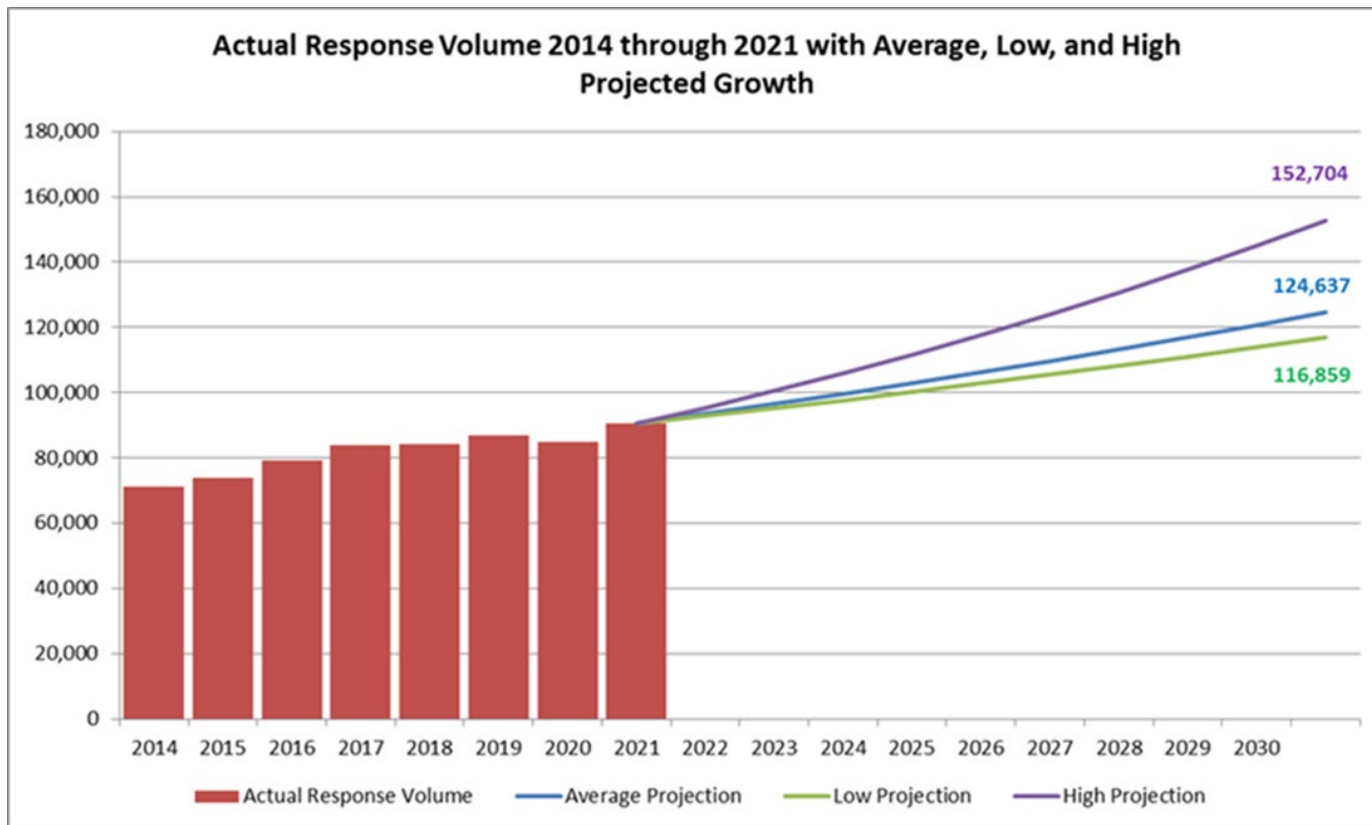
Addition of five 12-hour shifts at peak demand hours to meet existing service demand

Maximum Responses by Hour of Day																								
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



## Future Demands

Addition of one staffed ambulance per year for each year of the Master Plan to address projected growth in service demand





## BUILT ENVIRONMENT & INFRASTRUCTURE

### Inadequate Shared Space

Existing Station Space			
Station	Number of Stations	Number of Bays	Number of Bays Available
HFD/HPS Shared	16	79	0
HFD Only	11	33	1



# Key Objectives



## BUILT ENVIRONMENT & INFRASTRUCTURE

### No Space at HPS Stations

HPS Station 32 Capacity	
Total Vehicle Space	Current Vehicles
5	9



HPS Station 30 Vehicle Placement				
Total Vehicles	Spaces Inside	Vehicles Inside	Vehicles Outside that should be Inside	Admin Vehicles Outside
38	17	29	6	3





## BUILT ENVIRONMENT & INFRASTRUCTURE

### Immediate Need

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

- Additional facility  
(Committee Report forthcoming)
  - Response station
  - 8 – 10 ambulances
  - Logistics capabilities
  - Warehouse space
  - 11,500 – 20,000 sq ft
- Renovate Station 30  
(Currently costing)
  - Urgent repairs required



Station 30 Flooding



## BUILT ENVIRONMENT & INFRASTRUCTURE

### Medium to Long Term Need

Conduct an HPS facility study and develop a strategy to address the medium and long-term needs of a growing service

- Integrated into GRIDS 2
- Reflects boundary and densification decisions
- Considers areas of high demand
- Analyzes various station models



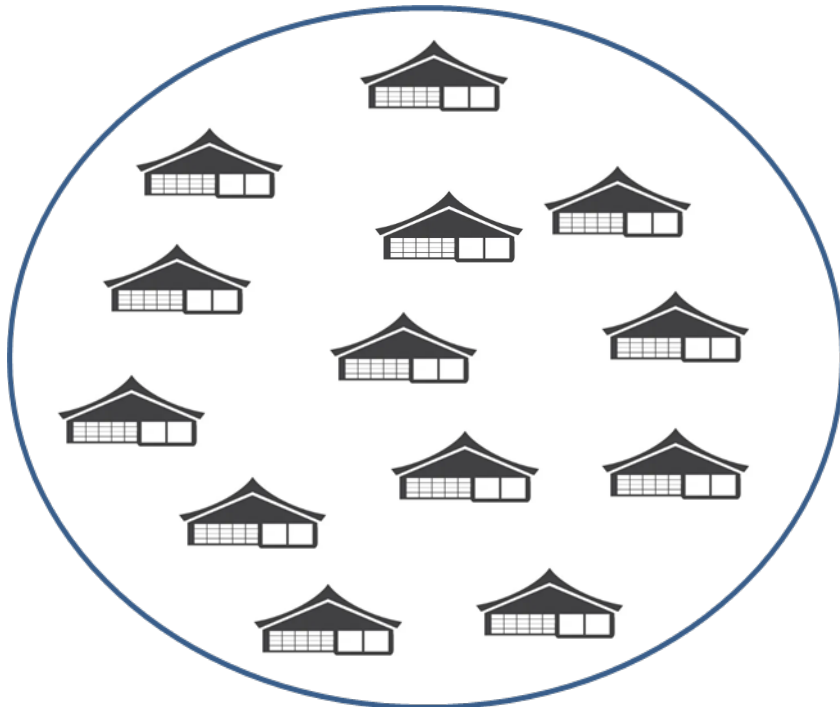
One of Peel Paramedic Service's Reporting Stations



## BUILT ENVIRONMENT & INFRASTRUCTURE

### Deployment Models

All Reporting Stations



Current

Central Reporting Stations



Proposed



# Key Objectives

## CLEAN & GREEN

Develop a clean and green plan to reduce the carbon footprint of HPS including examining the feasibility of acquiring electric vehicles and implementing wireless charging stations



## CULTURE & DIVERSITY

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

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

# Staff Engagement

## OUR PEOPLE & PERFORMANCE

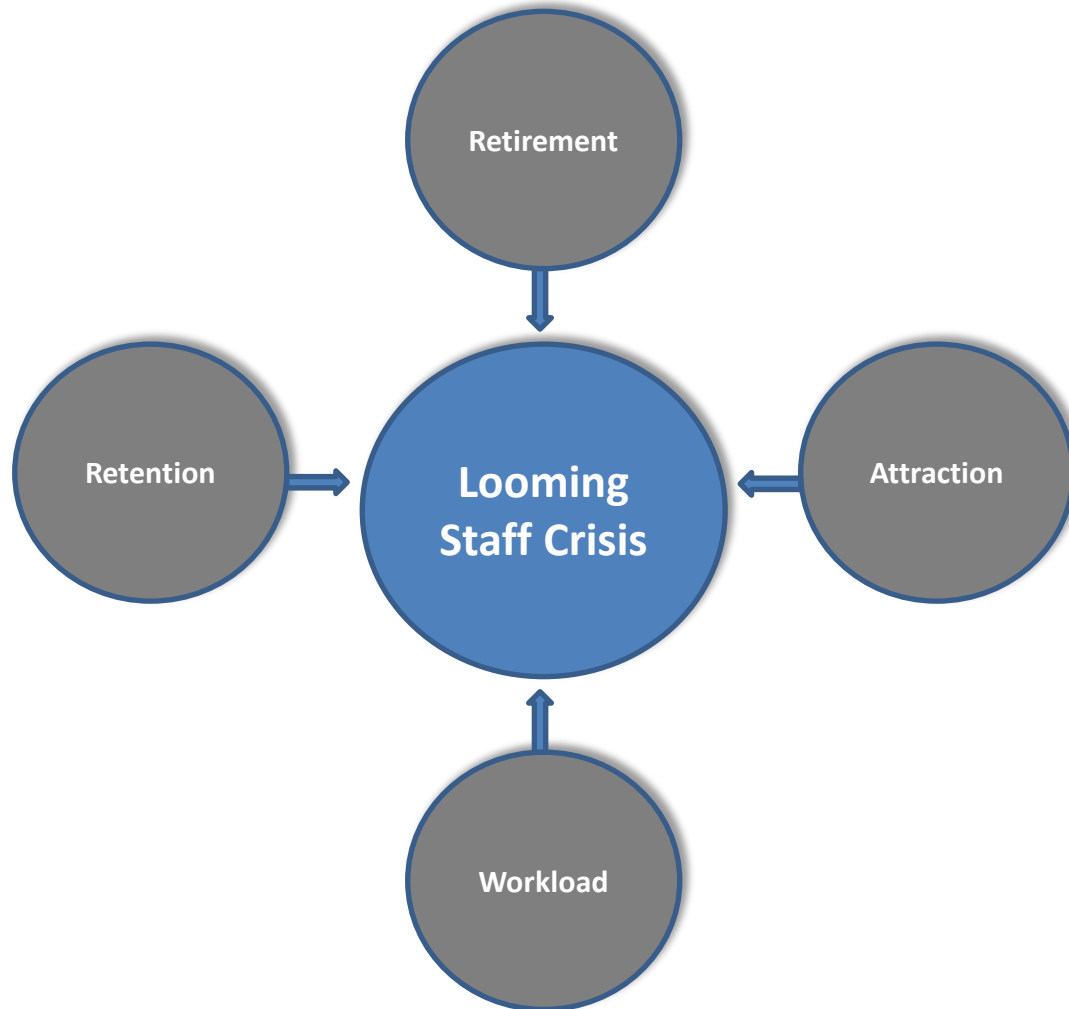
Input received in a variety of ways:

- Our People Survey
- Professional Development Days surveys and discussions
- Suggestion boxes at stations
- Informal discussions
- Pulse surveys

Areas for improvement:

- Workload/Staffing
- Morale
- Career Development
- Recognition





# Key Objectives

## OUR PEOPLE & PERFORMANCE

Develop a 'people plan' to ensure HPS's workforce can perform optimally in a positive environment now and in the future. The plan will include:

- Attraction plan
- Retention plan
- Succession plan
- Managerial developmental position
- Enhanced health and wellness initiatives
- Advance a just and safe culture
- OPS survey results actions
- EDI initiatives



## OUR PEOPLE & PERFORMANCE

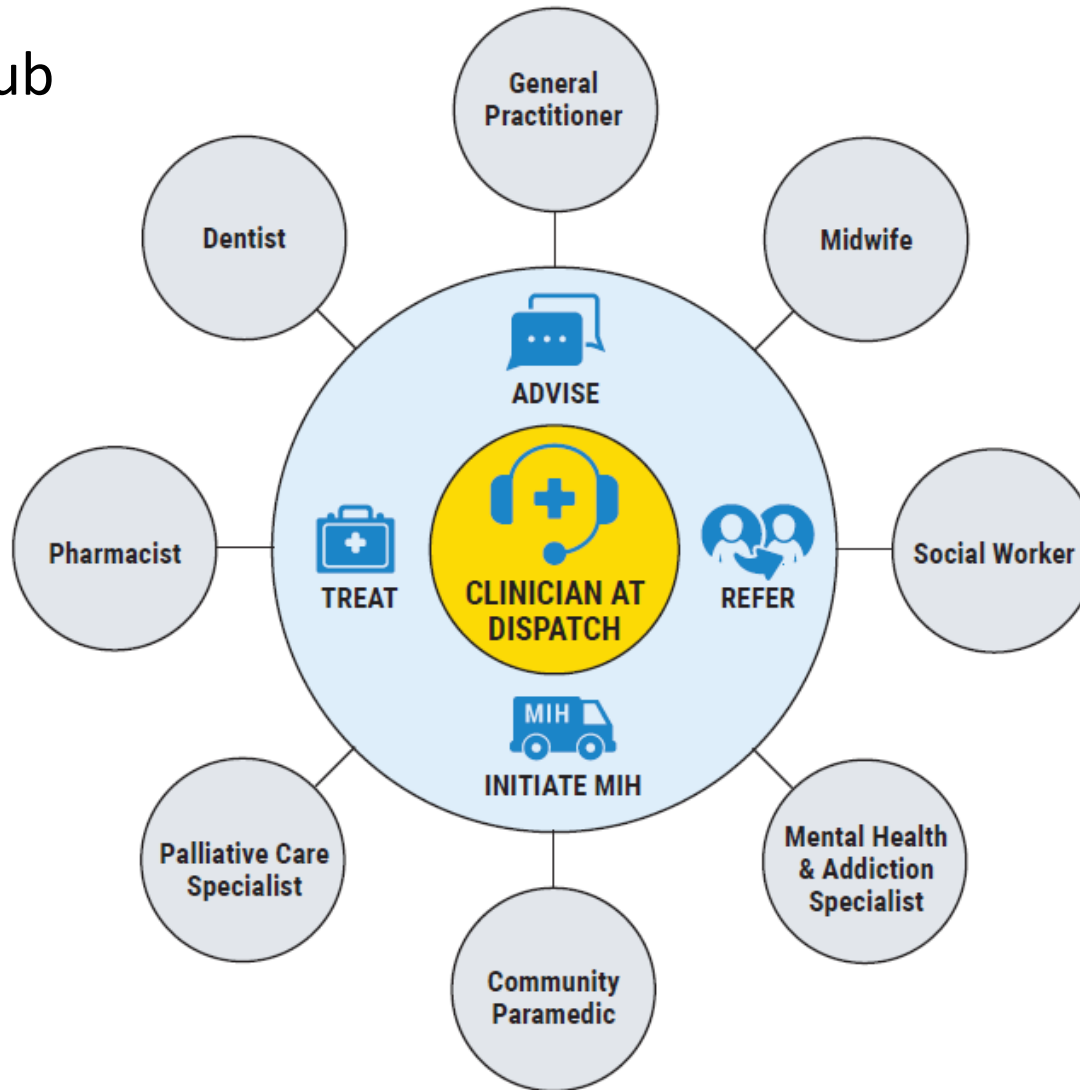
### **Complex Staffing Needs – Not just more paramedics**

- Paramedic capacity to keep pace with growth demands
- Supervisors to support paramedics and supervise the operation of facilities and equipment
- Logistics personnel to manage increased workload and match future deployment models
- Evolving Mobile Integrated Health (Community Paramedicine, Social Navigator)
- Managerial developmental for succession planning
- Reliability management system to lead
- Cardiac Safe City program lead
- Dispatch clinical hub practitioner



# Transformational Change

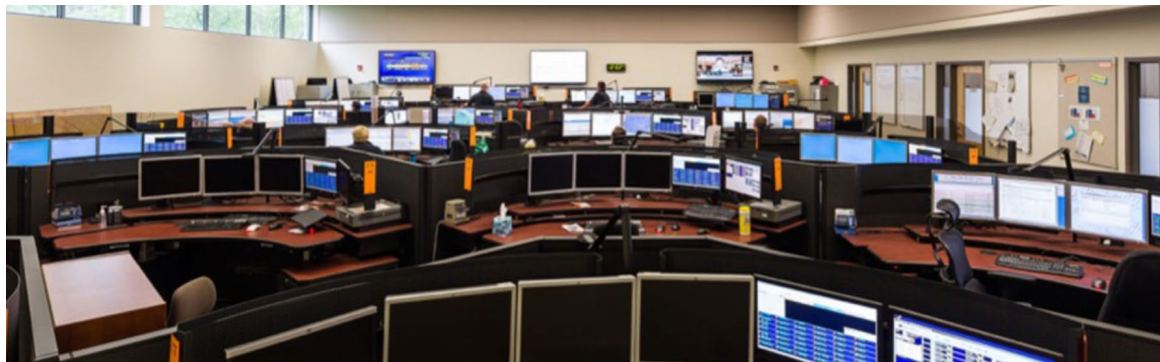
## Clinical Hub



# Transformational Change

## Pursue Dispatch Responsibilities

- HPS and dispatch centre would be fully integrated
- One team, one goal
- Goals and functions of dispatch would be aligned with HPS
- 100% provincially funded
- Opportunity for innovative solutions
- Supports clinical hub model and integrated patient record



Source: McCallum Sather



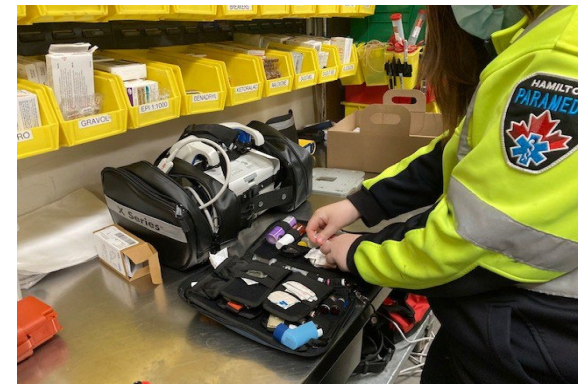
# Transformational Change

## Centralized Logistics for City Divisions

- HPS pursue responsibility to purchase and manage shared medical supplies for City Divisions providing health care
- Centralized and automated record-keeping

### Benefits

- Optimization of inventory by avoiding under and over stocking
- Automated system integrated with accounting and stock control
- Avoid duplication of efforts
- Purchasing large volumes may lead to greater discounts
- Better prepared for disruptive events by maintaining a 6-month supply





# Transformational Change

## Enhanced Deployment

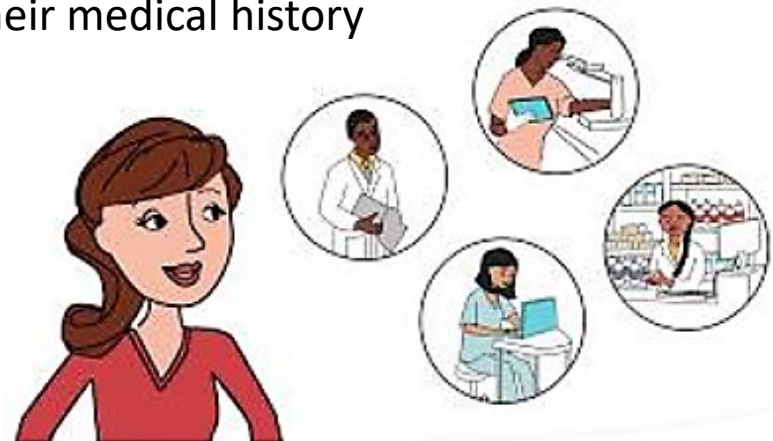
- Increase complement of Advance Care Paramedics to achieve 90% advanced coverage for calls requiring advanced procedures
- Redeploy Emergency Response Vehicles
- Update Tiered Response Agreement to reduce unnecessary use of fire service resources on medical calls



# Transformational Change

## One Patient, One Record

- Integration and continuity of health care records throughout the health care journey
- Automated patient tracking registration
- Up-to-date two-way patient information shared in real time among practitioners
- Quick access to patient records for faster more efficient care
- Ensures the right level of care is provided, when it is required and where it is appropriate
- Reduces the need for patients to repeat their medical history
- Reduces duplication in services and tests
- Seamless patient journey



Source: eHealth Ontario

# Transformational Change

## Information Technology

- Build on existing successes
- Develop an IT strategy to improve operational efficiency
- Acquire smartphones for all paramedics with advanced technology to integrate with dispatch systems, access electronic patient care records and workplace safety applications
- Work with the province and the GHHN 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



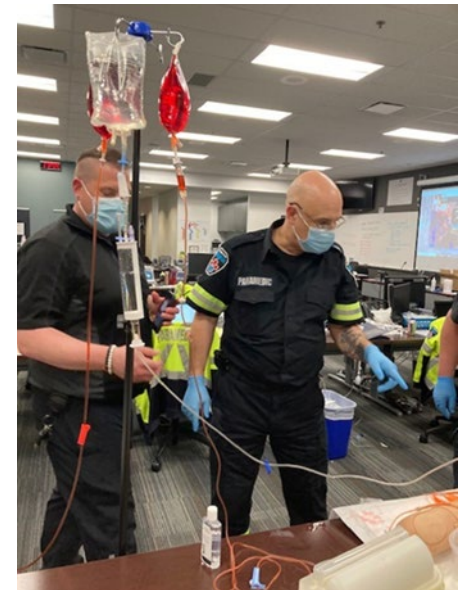
# Transformational Change

## Student Grant Recruitment Program

- Hamilton investing in Hamiltonians
- Candidates chosen through application process
- Fully fund one-year college or equivalent paramedic program
- Guarantee employment upon completion

### Benefits

- Ensure sufficient number of paramedics
- Enhance retention of new recruits
- Focus on development of Hamiltonians to a career in paramedicine
- Increase diversity of workforce
- Support for those without means
- Avoid time and costs associated with traditional recruitment



HPS Master Plan (2023 - 2032) Financial Projection - Committee Summary (\$000's)

Scenario A

1) Address Current Demand by increasing FTE by 25 in 2023 and adding 3 ambulances

2) Address Growth Demand by increasing FTE by 10 in 2023-2032 and adding 1 ambulance each year respectively with the exception of 2 in 2026 and 2031

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Gross Capital Costs</b>											
Vehicles & Facility	14,863	348	354	723	369	376	383	391	797	406	19,009
<b>Sources of Funding</b>											
Development Charges, WIP, City Debt	(14,091)	(348)	(354)	(279)	-	-	-	-	-	-	(15,072)
<b>Net Capital Costs</b>	<b>772</b>	<b>-</b>	<b>-</b>	<b>444</b>	<b>369</b>	<b>376</b>	<b>383</b>	<b>391</b>	<b>797</b>	<b>406</b>	<b>3,937</b>
<b>Gross Operating Costs</b>											
Staffing, Debt Repayment, Other Operating Expenses	5,843	3,003	2,074	2,192	2,113	2,138	2,164	2,190	2,330	2,243	26,290
<b>Sources of Funding</b>											
Tax Stabilization Reserve <sup>1</sup>	(2,922)	-	-	-	-	-	-	-	-	-	(2,922)
Ministry Funding - LASG Agreement <sup>2</sup>	-	(2,925)	(1,669)	(1,200)	(1,254)	(1,209)	(1,217)	(1,224)	(1,232)	(1,297)	(13,225)
<b>Net Operating Costs</b>	<b>2,922</b>	<b>78</b>	<b>405</b>	<b>992</b>	<b>859</b>	<b>929</b>	<b>947</b>	<b>966</b>	<b>1,099</b>	<b>947</b>	<b>10,143</b>

Scenario B

1) Address Current Demand by increasing FTE by 10 in 2023, 10 in 2024, and 5 in 2025 and adding 1 ambulance each year respectively

2) Address Growth Demand by increasing FTE by 10 in 2023-2032 and adding 1 ambulance each year respectively with the exception of 2 in 2026 and 2031

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Gross Capital Costs</b>											
Vehicles & Facility	14,182	695	709	723	369	376	383	391	797	406	19,029
<b>Sources of Funding</b>											
Development Charges, WIP, City Debt	(14,091)	(572)	(583)	(279)	-	-	-	-	-	-	(15,525)
<b>Net Capital Costs</b>	<b>91</b>	<b>123</b>	<b>126</b>	<b>444</b>	<b>369</b>	<b>376</b>	<b>383</b>	<b>391</b>	<b>797</b>	<b>406</b>	<b>3,504</b>
<b>Gross Operating Costs</b>											
Staffing, Debt Repayment, Other Operating Expenses	3,605	4,462	2,903	2,192	2,113	2,138	2,164	2,190	2,330	2,243	26,340
<b>Sources of Funding</b>											
Tax Stabilization Reserve <sup>1</sup>	(1,803)	-	-	-	-	-	-	-	-	-	(1,803)
Ministry Funding - LASG Agreement <sup>2</sup>	-	(1,806)	(2,398)	(1,614)	(1,254)	(1,209)	(1,217)	(1,224)	(1,232)	(1,297)	(13,250)
<b>Net Operating Costs</b>	<b>1,803</b>	<b>2,656</b>	<b>504</b>	<b>578</b>	<b>859</b>	<b>929</b>	<b>947</b>	<b>966</b>	<b>1,099</b>	<b>947</b>	<b>11,287</b>

Scenario C

1) Address Growth Demand by increasing FTE by 10 in 2023-2032 and adding 1 ambulance each year respectively with the exception of 2 in 2026 and 2031

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
<b>Gross Capital Costs</b>											
Vehicles & Facility	13,841	348	354	723	369	376	383	391	797	406	17,987
<b>Sources of Funding</b>											
Development Charges, WIP, City Debt	(13,841)	(348)	(354)	(279)	-	-	-	-	-	-	(14,822)
<b>Net Capital Costs</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>444</b>	<b>369</b>	<b>376</b>	<b>383</b>	<b>391</b>	<b>797</b>	<b>406</b>	<b>3,165</b>
<b>Gross Operating Costs</b>											
Staffing, Debt Repayment, Other Operating Expenses	2,169	3,003	2,074	2,192	2,113	2,138	2,164	2,190	2,330	2,243	22,616
<b>Sources of Funding</b>											
Tax Stabilization Reserve <sup>1</sup>	(1,085)	-	-	-	-	-	-	-	-	-	(1,085)
Ministry Funding - LASG Agreement <sup>2</sup>	-	(1,088)	(1,669)	(1,200)	(1,254)	(1,209)	(1,217)	(1,224)	(1,232)	(1,297)	(11,388)
<b>Net Operating Costs</b>	<b>1,085</b>	<b>1,915</b>	<b>405</b>	<b>992</b>	<b>859</b>	<b>929</b>	<b>947</b>	<b>966</b>	<b>1,099</b>	<b>947</b>	<b>10,143</b>

## 2022 Key Initiatives

- Facilities request to address immediate needs
- Increase ACPs to achieve 90% ACP response
- Support PCPs in advancing skillset
- Increase use of virtual care
- Place integrated smartphones in all ambulances
- Develop Plans:
  - People Plan
  - IT Strategy
  - Integrated Patient Records
  - Clean and Green Plan
  - Clinical Hub at dispatch
  - Specialized Services Framework



# Committee Support

Your support is requested for:

- Overall endorsement of the Hamilton Paramedic Master Plan (2022-2031)
- Consideration of business cases for staffing, facilities and infrastructure
- Direction to return to Committee as required for additional resources and support



