



NIAGARA REGIONAL POLICE SERVICE

Police Service Board Report

PUBLIC AGENDA

Subject: Execution of Contract – Operation Research in Health
Report To: Chair and Members, Niagara Police Service Board
Report Date: 2025-03-06

Recommendation(s)

That the Niagara Police Service Board (Board) approve the attached proposal brief provided by Operation Research in Health (ORH) for \$168,500.00 plus HST to complete a Facility Master Plan.

Key Facts

- The Niagara Regional Police Service (Service) is preparing to update its facility plan to support the development of the 2026-2029 Strategic Plan, as well as prepare for anticipated growth.
- ORH was awarded the contract to develop a 10-year facility plan for Niagara Emergency Medical Services (NEMS) through a formal procurement process.
- A single source award to ORH to prepare a facilities plan for the Service was recommended because of ORH's ability to leverage proprietary data gathered during the NEMS facility plan.
- The scope of the work is available in Appendix 1 and will commence in April 2025 with a tentative completion date by the end of August 2025.
- The Service has operating funds available to engage third party agents for Service-wide initiatives such as a Facility Master Plan.

Financial Considerations

As per Board By-Law 412-2024, Financial Reporting, Control and Procurement of Goods and Services, contractual agreements awarded via a single source procurement process with a contract value greater than \$150,000.00 CAD, requires Board approval.

ORH was awarded the contract to develop a 10-year facility plan for NEMS through a formal procurement process. ORH's ability to leverage proprietary data gathered during the NEMS process and consideration for co-locating opportunities between the 2 services, was the underlying reason that a single source award to ORH to prepare a facilities plan for the Service was recommended.

Included in the 2025 Operating Budget are funds to cover consulting fees for Service-wide initiatives such as the development of this 8-year Facility Master Plan.

Analysis

The last Facility Master Plan development was conducted in 2010 following an Ontario Civilian Commission on Police Services (Commission) proceeding initiated by the Service in regards of a long-term accommodation plan. The Commission ruled in favour of the Service that the Region prepare a plan to construct a new Headquarters and replace 1 District - St. Catharines and 2 District - Niagara Falls stations. The final stage of the long-term plan, 1 District station was completed in 2021.

For 2025, the Service is preparing to update its facility plan to support the development of the 2026-2029 Strategic Plan, as well as prepare for anticipated growth. The Service plans to leverage on the recent development of the NEMS Facilities Master Plan to determine if there are opportunities to co-locate throughout the Region.

The Service will engage ORH to develop a Facility Master Plan to 2033 (date to align with NEMS Master Plan). ORH recently completed the NEMS Facilities Master Plan and will use their proprietary data gathered during this exercise towards the development of the Service's Facility Master Plan. The scope of work is detailed in Appendix 1 and it includes recommendations on optimizing facilities with NEMS where co-location opportunities exist.

The scope of work will cover the following points:

- Current facility state and future facility model for service delivery (i.e., Hub and Spoke);
- Ensure compliance to all Acts that govern the Service throughout the study;
- Review current response time targets;
- Review Service policies and procedures where applicable;
- Review current facilities: six districts, Fleet Services Unit, Training Unit, Emergency Services (nine facilities in total) for location and size versus response targets and call volumes;
- Review implications to staffing and existing authorized strengths;
- Review population predictions for all related areas;
- Consider overlap of police needs with NEMS needs to ensure responsibility for public funds and spending; and
- Consider cohort option for Emergency Services, Training Unit, and Fleet Services Unit, with consideration given to range requirements according to current requirements. The following locations: Headquarters, 1 District - St. Catharines, 2 District - Niagara Falls, and 3 District – Welland are not going to be relocated and should not form any part of the report or the recommendations.

The project will commence in April 2025 with an anticipated completion date of August 2025. In order to align with the NEMS project plan to procure land and commence architectural design, it was necessary for the Service to proceed with this consultative process at this time.

Once complete, ORH will provide the Board with a presentation on their findings and recommendations. The Facility Master Plan will be a guide for the Board and Service to plan for growth within the Region, identify optimal geographic locations that will support the communities, and maximize the utilization of resources, as well as support the development of the 10-year Capital Budget.

Alternatives Reviewed

Not applicable.

Relationship to Police Service/Board Strategic Priorities

The Board is responsible to ensure the Service is equipped with the adequate resources to fulfil its service mandate, including a proper facilities master plan.

Relevant Policy Considerations

Board By-Law 412-2024, a By-Law to Regulate Financial Reporting, Control, and Procurement of Goods and Services in the Niagara Regional Police Service.

Other Pertinent Reports

Not applicable.

This report was prepared by Stephen Harman, Manager Materials, Fleet Services; in consultation with and reviewed by Laura Rullo, Director, Finance and Asset Management. Recommended by Darrin Forbes, Acting Deputy Chief, Support Services.



Submitted by:

Bill Fordy, O.O.M. #9615
Chief of Police

Appendices

Appendix 1 - Facility Master Plan to 2033 Proposal Brief



Niagara Regional Police Service
Facility Master Plan to 2033

Proposal Brief

27 February 2025
NRPS/1

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ORH is the trading name of Operational Research in Health Limited, a company registered in England with company number 02676859.

ORH's quality management system is ISO 9001:2015 certified: recognition of ORH's dedication to maintaining high quality services for its clients.



ORH's environmental management policy is ISO 14001:2015 certified: verification of ORH's desire to deliver its services and products in a sustainable way and to reduce ORH's impact on the environment.



ORH's information security management system is ISO 27001:2017 certified: evidence of ORH's commitment to implementing international best practice with regard to data security.



Disclaimer

The information in this document is presented in good faith using the information available to ORH at the time of preparation. It is provided on the basis that the authors of the report are not liable to any person or organisation for any damage or loss which may occur in relation to taking, or not taking, action in respect of any information or advice within the document.

1 Introduction

- 1.1 This document has been prepared following a meeting held on 26 February 2025 between Stephen Harman, Materials Manager for Niagara Regional Police Service (NRPS) and Ali Motion and Jon Mobbs from ORH. This proposal brief formalizes the key outputs from the discussions, summarizing the support that ORH can offer NRPS in the development of a Facility Master Plan to 2033.

Objectives

- 1.2 The overarching objective of this work is to develop a Facility Master Plan for NRPS, encompassing the time period of 2026/27 through to 2033, and will include recommendations to achieve optimal and efficient policing facilities utilizing evidenced-based research and scientific methods.
- 1.3 A secondary objective of this work is to consider the NRPS requirements against the context of the existing master plan already presented to Niagara Region for EMS, to identify any opportunities for overlap and collaboration.

Scope

- 1.4 The detailed scope for this project has been captured in the invitation to quote document, shown in Appendix **A**.

Delivery

- 1.5 The key activities required in the delivery of this project include:
- Assessment of the current facility portfolio and risks
 - Understanding NRPS operations
 - Understanding future staffing needs
 - Geographical optimizations
 - Developing a series of prioritized recommendations and creating a high-level implementation road map

Project Governance

- 1.6 The key personnel for this work will be the project manager at ORH and the project lead at NRPS.

Information	ORH	NRPS
Contact Name	Ali Motion	Stephen Harman
Job Title	Principal Consultant	Materials Manager
Telephone Number	+44 0118 959 6623	(905) 688-4111 Ext 1025207
Email Address	ali.m@orhltd.com	Stephen.Harman@niagarapolice.ca

- 1.7 At the outset of the project, NRPS should designate a steering group for the project comprising the ORH and NRPS project leads, plus other key personnel from NRPS.
- 1.8 This steering group should be convened at key points in the project timeline, including at project initiation and the review of the risk profile for NWFRS, and at further regular intervals during the development of the Master Plan (dates TBC).
- 1.9 In addition, the ORH and NRPS project leads will have a catch-up video call every two weeks to ensure that the project is progressing as planned.

2 Proposed Project Team

- 2.1 ORH will put forward the following project team:
- Ali Motion – Project Manager
 - Jon Mobbs – Principal Consultant
 - Tom Gloess – Project Consultant
 - Sam Taylor – Project Consultant
- 2.2 Brief bios for our project delivery team, including relevant experience and capabilities, are provided in Appendix **B**.

3 Quotation

3.1 ORH charges a fixed price for its reviews based on the expected number of consultant days required to undertake the work. The total fixed price for this study is **\$168,500** plus HST. There will be no additional charges for any expenses incurred.

3.2 ORH proposes the following invoicing schedule:

- | | |
|--|-----------------------|
| • Project Initiation | CAD \$8,425 plus HST |
| • Milestone 1: Analysis of Current Portfolio | CAD \$33,700 plus HST |
| • Milestone 2: Model based on Current Estate | CAD \$33,700 plus HST |
| • Milestone 3: Model based on Optimized Estate | CAD \$33,700 plus HST |
| • Milestone 4: Draft Report | CAD \$33,700 plus HST |
| • Milestone 5: Final Report | CAD \$25,275 plus HST |

3.3 All invoices are payable within 30 days of the invoice date.

3.4 ORH reserves the right to send interim invoices between project milestones if the project is delayed by the client.

3.5 The cost quoted here will remain valid for a period of three months from the date of this proposal.

Terms and Conditions

ORH's Terms and Conditions of Sale for Services can be read on our website:

3.6 <http://www.orhltd.com/terms-and-conditions>.

ORH's data Processing Notice can be read on our website:

3.7 <http://www.orhltd.com/orh-data-processing-notice>.

Provision of a Purchase Order number implies acceptance of these Terms and Conditions.

3.8

Request for Quote To ORH
For
Niagara Regional Police ten (10) Year Facilities
Master Plan

Issued: **March 1st 2025**

Submission Deadline: **March 30th 2025**

Invitation to Quote – ORH

1. Invitation

This Request for a quote is an invitation by the Niagara Regional Police (“NRPS”) to ORH to provide a quotation to the **Niagara Regional Police (NRPS) for a Ten (10) Year Facilities Master Plan**, as further described in the deliverables section of this request.

Niagara Regional Police (NRPS) is seeking a successful proponent to develop a master facility plan for the Niagara Region’s Police Services which would encompass a time period of 2026/7 – 2033. The master plan will include recommendations to achieve optimal and efficient Policing facilities utilizing evidence-based research, scientific methods, and industry proven leading practices. A secondary objective of the Master Plan will be to consider the existing master plan already presented to the Niagara Region for EMS when presented a final report, considerations should firstly be given to proposed sites for NRPS and Police sharing where recommendations overlap with EMS recommendations.

2. Work Plan and Project Schedule

The Work Plan and Project Schedule will be reviewed at the Project Kick off meeting and may be further adjusted as needed to meet the NRPS deliverables and schedule.

Niagara Regional Police tentative schedule:

Submit Work Plan *	April 2025
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Project Milestone Schedule

Start Date

Project Kick-Off	April 2025
Document Review	May 2025
Stakeholder Meetings	May - June 2025
Draft report - Current facility portfolio and risks	July 2025
Draft report - Predictive model based on traditional model	August 2025
Draft Report - Predictive model based on hub, spoke and post model, Iterative models and other Geographical Optimizations	August 2025

Draft Report - Recommendations	August 2025
Final Report	September 2025

If a delay is anticipated during the project, the proponent will provide a delay forecast as soon as delay can be reasonably inferred along with mitigation strategies and indicating additional resource allocation that will be made available to meet the project milestone dates. The Successful proponent must maintain and monitor a current project schedule through the project duration and ensure project objectives are met.

3. Project Management and General Project Requirements

1. proponent to hold six (6) meetings online (via Teams platform) for the duration of the project. Additional meetings may be required at the discretion of the Niagara Regional Police – Project Manager Materials Manager in order to meet the requirements of the deliverables.
2. The proponent shall designate one (1) member of their staff as Project Manager – Certified Project Manager) to act as liaison with the NRPS. The staff member so designated will have full authority to act on behalf of the proponent in all matters, and to commit the physical and financial resources of the proponent.
3. With the exception of the Project Kick-Off meeting, the proponent will chair all Project meetings. An Agenda must be provided prior to the meeting to ensure efficient use of staff and proponent Team resources. Minutes are to be circulated within seventy-two (72) hours of the meeting.
4. It is the responsibility of the proponent to review and validate all documents provided by the NRPS at the beginning of the Project.
5. The proponent shall co-ordinate the services of all sub-consultants engaged or retained by the proponent and be responsible for quality control.

4. Scope of Work and Deliverables

the proponent shall review the following information to ensure all past reports, legislative requirements and specific needs for Niagara Regional Police are met when developing a master facilities plan:

1. Review future facility model for service delivery (i.e. Hub and Spoke);
2. Ensure compliance to all Acts that govern the Niagara Regional Police throughout the study;
3. Review past reports related to facilities; if applicable.
4. Review current Response Time Targets;
5. Review Niagara Regional Police Policies and Procedures where applicable.
6. Review current facilities, Districts (6), Fleet, Training Unit, Emergency Services (9 facilities in total) for location/size vs response targets and call volumes.
7. Review implications to staffing; and existing authorized strengths.

8. Review supply lines and inventory needs;
9. Review fuel consumption.
10. Review access to roads and main routes from all facility locations.
11. Ensure emergency/disaster plans considered.
12. Review population predictions for all related areas.
13. Consider any municipal, provincial or federal directives.
14. Consider ties to Region of Niagara.
15. Consider future long-term development;
16. Consider Building Condition Assessments of current buildings.
17. Consider overlap of Police needs with EMS needs to ensure responsibility for public funds and spending
18. Consider cohorts with EMS for optimized estate configuration
19. Consider cohort option for Emergency services, Training unit and Fleet with consideration given to range requirements according to current requirements.
20. Consider the following locations, NRPS Headquarters, 1 District St Catharines, 2 District Niagara Falls, 3 District Welland are not going to be relocated and should not form any part of the report or recommendations.
21. Prisoner Holding, or Custody location is not to be included in this study.

4.2 Deliverables

The NRPS has further broken down the Project to a series of milestone deliverables as indicated below. These Millstones are directly related to the payment terms. The proponent will submit each of the drafts indicated in the Milestone Schedule in Word and PDF format (not password protected):

1. Current facility portfolio and risks
2. Predictive model based on current estate
3. Predictive model based on optimized estate configuration
4. Recommendation
5. Draft of full report (including modifications requested by the Region for previous versions)

5 Milestones

Milestone 0	Project Inception	5% of Total Contract Price
Milestone 1	Draft Report – 1 Current Portfolio Analysis and Risks	20% of Total Contract Price
Milestone 2	Draft Report – 2 Predictive Model Based on Current Estate	20% of Total Contract Price
Milestone 3	Draft Report - 3 Predictive Model Based on Optimized Estate	20% of Total Contract Price
Milestone 4	Draft Report – 4 Recommendations	20% of Total Contract Price
Milestone 5	5 - Final Report	15% of Total Contract Price

Each draft will include a presentation to the NRPS Project Manager (PM) and steering committee.

Niagara Regional Police suggests that the presentation requirements focus on the deliverables of where the current “high risk” station should be located, followed by the ideal location of the lower risk stations for optimal response time, and finally, the “ideal scenario” where all sites could be replaced and set in their optimal location. Recommendations made to NRPS in order of priority to determine the road map to 2033. Niagara Region suggests presentation will be in Power Point (.ppt) format.

The Final Report will incorporate all NRPS comments and be provided in Word and PDF format. Word and PDF document must be developed in an accessible format as per AODA accessibility requirements. The Final Report to be provided to the NRPS within two (2) weeks of Region’s response to the full draft report.

The Final Report must meet all the requirements stated in this proposal and including any additional information deemed relevant based on the Successful proponent’s professional

expertise. Report to include an Executive Summary and at a minimum, the sections described below. Each of the sections below describes tasks with associated deliverables:

a. Current facility portfolio and risks:

- i. Review current risk base analysis
- ii. Assessment of owned vs leased facilities for best strategy moving forward
- iii. Best practice comparison to other Police Services in Ontario, these comparable must include 2 of the following services, York Police, Waterloo Police, Peel Police, Toronto Police, London Police, Durham Police – (This would be dependent on NRPS making introductions and the other services willingness to assist and is therefore not a mandatory requirement but a preferred option)
- iv. Categorize locations from most risk to least risks

b. Understanding future staffing needs

1. Produce demand projections to 2033 (based on available projected population changes) and use these and predictive simulation modelling based on current (traditional model) to identify:
 - i. Staffing requirements by location to meet anticipated workload taking into account response the complete workload of Patrol officers not just the time spent attending incidents
 - ii. Expected response time performance
 - iii. Additional staffing requirements to achieve enhanced response times / response time targets (if predicted response performance in part ii) is not sufficient)
 - iv. Calculation of minimum staffing levels by station
 - v. Feasibility of current building portfolio to meet identified staffing requirements: capacity, lease risk, age of facility and suitability of facility layout for service needs
 - vi. Impact on Officer Travel time

c. Geographical Optimizations

1. Determine optimum estate configuration across the region. Compare the results in part b) to optimum estate configuration of:
 - i. Staff requirements
 - ii. Expected response performance.
 - iii. Impact on division structure
 - iv. Opportunities to co-locate with locations identified in the Niagara EMS Masterplan

- v. Capacity requirements by location
 - vi. Minimum staffing levels by location
 - vii. Impact on Officer Travel Time
- a. Other geographical optimization considerations: Locations of 'store fronts' and public access to these locations
 - b. Hub alternatives for addressing capacity constraints
 - c. Options for co-locating other functions, including training, fleet, Emergency Services etc.
2. Develop phased implementation plan to 2033 prioritizing highest risk locations. Implementation plan to include:
 - i. Cost estimates for all new builds
 - ii. If required, short term lease locations and market cost
 - iii. Recommendation of lease vs own.

d. Recommendation:

1. Develop a series of prioritized recommendations (timing and order to build/move locations) based on recommended option
2. High Level Implementation Road Map, Investment (if any), ROI (if required)
3. Ownership structure based on least risk and best practice in industry noting existing comparable.
4. Benefits of identified optimum estate configuration and recommendations

Accompanying the draft and final reports will be a presented to the NRPS PM. PowerPoint presentation to summarize findings and include diagrams, recommendations and identified risks.

B. MATERIAL DISCLOSURES

1. Examination of Site

The Proponent are required to satisfy themselves as to existing conditions of the site and must take all site conditions into account in preparing their proposals.

2. Changes to Key Personnel (Project Team)

The Proponent shall notify the NRPS in regard to any key changes to the Project team involved in the NRPS Facility Master Plan

3.2 Niagara Region Driven Changes

If, during project delivery, the proponent's key personnel is not performing to the satisfaction of NRPS, NRPS reserves the right to request a change to key personnel due to lack of performance. The proponent shall suggest an alternative person with equal or greater experience and qualifications than the team member being replaced. NRPS will not entertain any rate and/or fee increase due to successful proponent staffing changes.



ALI MOTION

Principal Consultant



QUALIFICATIONS

BA (Hons, 2:1) Management Science,
University of Strathclyde, 2006

CAREER HISTORY

2023 – present Principal Consultant, ORH
2015 – 2022 Consultant, Process Evolution
2008 – 2015 Senior Consultant, British Airways
2006 – 2008 Consultant, British Airways

EXPERIENCE

Ali is the commercial lead for our Policing business as well as actively managing many of our projects. Ali joined Process Evolution in 2015 and has developed extensive experience in the delivery of consulting services in the Policing and Fire sector.

Ali's experience includes:

- Leading in Neighbourhood reviews in over 10 Police Forces
- Developing new software propositions including the Harm and Risk Tool
- Conducting several studies modelling resource requirements for Specialist Operations functions including Firearms, Dogs Section and Roads Policing Units.

SELECTED PROJECTS

Resource Assessment of the Joint Firearms Unit for Dyfed-Powys Police, Gwent Police, and South Wales Police

The Joint Firearms Unit (JFU) represents a strategic collaboration between three police forces: Dyfed-Powys, Gwent, and South Wales with the aim of enhancing resilience, interoperability, and cost-efficiency in providing firearms capabilities. ORH, operating under the Process Evolution brand, was commissioned to conduct an independent assessment of the Armed Response to evaluate whether the current allocation of Armed Response Vehicles (ARVs) adequately met the demands and risks faced by the JFU. Ali led the assessment and presented key recommendations on resourcing numbers, optimal locations, shift pattern realignment and strategic workforce planning. The adoption of these recommendations will strengthen the JFU's ability to manage demand, mitigate risks and ultimately enhance public safety.

Neighbourhood Policing Review, Derbyshire Police

ORH (under the Process Evolution brand) was commissioned to review Neighbourhood Policing across Derbyshire. The work baselined current activities, mapped harm and risk across neighbourhood areas and proposed changes to

resource allocation based on identified risks. The activity analysis provided insight as to how officers actually spend their time and contrasted this against neighbourhood priorities. This analysis was critical in understanding the misalignment between strategic goals and day-to-day operations. A bespoke risk map was developed, configured to account for various risk families, metrics, and weightings. This map blended professional judgement with data-driven evidence, ensuring a robust and accurate depiction of risk across neighbourhood areas.

To demonstrate the potential impact of budget cuts, Priority Based Budgeting was employed. This approach provided clear, evidence-based insights into how reductions in funding would affect neighbourhood policing activities. These findings were instrumental in securing additional resources to maintain key neighbourhood policing functions. Overall, the project's outputs helped Derbyshire Police to realign resources with actual needs, ensuring more effective and efficient neighbourhood policing.

Detailed Design Analysis of the Public Protection Unit for Staffordshire Police

Staffordshire Police commissioned Process Evolution to conduct a detailed design analysis of its Public Protection Unit (PPU), comprising 12 departments. The objective was to determine the number of officers and staff required to meet both current and future demand. The analysis revealed significant shortfalls in staffing levels, leading to extended investigative delays, reduced quality of work, high officer utilization rates, and staff welfare challenges. Ali managed the programme, resulting in a series of recommendations summarized in four key areas: overall resourcing; structures and process improvements; enabling services; data quality and reporting. Staffordshire Police is currently implementing these recommendations to enhance resourcing, service levels, and staff welfare within the PPU. The anticipated outcomes include improved investigative timeliness, higher quality outputs, and better overall staff wellbeing.

Strategic Fire Cover and Risk Review, Cornwall Fire

Cornwall FRS commissioned ORH (as Process Evolution) to undertake a strategic risk review to map risk across the county, assess the service's capability to manage that risk and evaluate scenarios to improve the management of that risk.

Ali led on the project delivery which culminated in a series of recommendations that would improve response performance, reduce risk particularly for on-call station areas and would ensure the Service's Prevention and Protection teams were adequately resourced to fulfil their remit.



JON MOBBS

Principal Consultant



QUALIFICATIONS

Diploma in Statistics, Open University, 2009

BSc (Hons, 2:1) Mathematics, University of Warwick, 2006

CAREER HISTORY

2018 – present Principal Consultant, ORH

2015 – 2018 Senior Consultant, ORH

2008 – 2014 Consultant, ORH

2006 – 2007 Analyst, ORH

EXPERIENCE

Jon is an experienced emergency services planner, responsible for managing ORH projects for emergency services in the UK and around the world. Jon also plays a key role in the development of ORH's suite of modelling tools for emergency services.

On joining ORH, Jon initially focused on data analysis and simulation modelling of emergency services, before taking on a consulting and project managing role.

Jon's experience at ORH includes:

- Project management for clients around the world, including services in Australia, New Zealand, Canada and the Middle East
- Modelling and optimization of all elements of emergency services, from call taking and dispatch to the deployment of emergency vehicles, and across different service functions
- Provision of planning tools and modelling support, including training for emergency service staff in their use

SELECTED PROJECTS

Local Policing Review, Nottinghamshire Police

ORH (under the Process Evolution brand) carried out a major review of local policing for Nottinghamshire Police to understand the requirements in contact management as well as the local policing functions. Jon led the response stream of the work, managing data collection, holding practitioner workshops with response officers, analyzing data, and using simulation models to explore alternative scenarios for service delivery. Key outcomes of the work included a reallocation of response officers to police stations to equalise workload and officer utilization rates, and identifying the additional officer requirements if neighbourhood policing team contributions to response were to stop.

Demand Analysis of Metro Ambulance Service Delivery, British Columbia Emergency Health Services

ORH carried out a major review for BCEHS, forecasting demand over five years and modelling different options of service delivery in the Lower Mainland and Greater Victoria areas. Modelling identified the changes required in the resource mix to improve utilization and response standards to all categories of call. Jon oversaw the analysis for this review and undertook the model setup and scenario modelling, before reporting the results to BCEHS. This review was fundamental to BCEHS developing its 'Transforming Emergency Health Services Action Plan', which credits ORH for providing the information to enable BCEHS to make 'evidence-based, system-wide improvements'.

Demand and Capacity Review, Northern Ireland Ambulance Service

ORH carried out a demand and capacity review for NIAS on behalf of the Association of Ambulance Chief Executives (AACE). The aim was to identify the impacts if NIAS was to adopt a new operating regime based on the Ambulance Response Programme (ARP) introduced across English ambulance services. ORH subsequently determined resource requirements (both operationally and in control) to meet response standards. Jon managed all aspects of the review, which required extensive consultation with colleagues from NIAS and AACE. Jon also presented the final report to the NIAS board, where its recommendations were formally accepted.

Achieving Response Time Targets, Ambulance Victoria

After AV received a boost in funding from the Victorian Government, ORH was asked to develop an Operational Improvement Plan (OIP) to ensure that response targets would be met across the state of Victoria within three years. The aim of the OIP was to identify the best way of deploying the additional resources associated with this increase in funding in both Metro and Rural areas, along with any operational efficiencies (including redeployment of existing resources). Jon managed all aspects of the work, and carried out the simulation modelling for Rural Victoria. He also presented the results to different stakeholders and provided a summary of the work to the board on project completion.



SAM TAYLOR

Analytical Consultant



QUALIFICATIONS

MMath (Hons, 1st) Mathematics, University of Surrey, 2022

CAREER HISTORY

2025 – present Analytical Consultant, ORH
2022 – 2024 Analyst, ORH

EXPERIENCE

Since starting at ORH Sam has worked on a variety of projects, both overseas and in the UK.

Sam's experience at ORH includes:

- Cleaning and manipulation of large datasets
- Creating inputs for ORH's in-house modelling programs
- Designing and producing an interactive dashboard to send to clients

SELECTED PROJECTS

Fire Cover Review, Gloucestershire Fire and Rescue Service

Gloucestershire Fire and Rescue Service commissioned ORH to undertake a fire cover review. The objective of this review was to use a data-driven approach to analyse the current profile of risk and response and evaluate options for future change.

Sam was responsible for cleaning and analysing historical CAD data and producing analysis of the current fire cover based on this. Sam also created inputs for and ran ORH's in-house models to determine the best options for future fire cover and optimal sites for potential new stations.

National Utilisation Analysis, His Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS)

HMICFRS commissioned ORH to undertake a national utilisation analysis. The intention of this analysis was to show the utilisation of every front-line resource in England. This was achieved through the creation of an interactive dashboard for each individual fire and rescue service.

Sam cleaned the national IRS data to determine the demand profile and utilisation for each front-line resource in England. Using this Sam created a dashboard for each fire and rescue service, which allowed comparison between resources and financial years.



TOM GLOESS

Analytical Consultant



QUALIFICATIONS

MSci (Hons, 2:1), Chemistry, University of Nottingham, 2017

CAREER HISTORY

2017 – 2020 Analyst, ORH

2020 – present Analytical Consultant, ORH

EXPERIENCE

Since joining ORH in 2017, Tom has been involved in a range of projects for emergency services in the UK, Canada, Australia and Sweden. His involvement in projects spans a wide variety of tasks, from data collection and analysis to simulation and optimization modelling. He also is part of the team that models sports facility locations for Sport England and sportscotland.

Tom's experience at ORH includes:

- Analyzing emergency and patient transport services' workload data for UK and overseas clients.
- Optimizing station locations and shift patterns using ORH's bespoke software in order to improve emergency response times.
- Modelling sports facility provision, locally and nationally across the UK.
- Developing internal and external tools and processes and investigating new analysis workflows.

SELECTED PROJECTS

10-year Master Plan, Essex-Windsor Emergency Medical Services, Ontario

Following major changes in legislation and hospital infrastructure together with increasing EMS demand in the County of Essex and City of Windsor, EWEMS commissioned ORH to provide a 10-year master plan to aid the growth of the service. Tom was the lead analyst for this project, which involved analyzing current service demand, performance and workload. During the later stages of the project Tom modelled a range of optimization and simulation scenarios for EWEMS.

Updating the Patient Allocation Matrix Report, New South Wales Ambulance

NSWA commissioned ORH to redesign the Patient Allocation Matrix report, a tool that reports hospital capacity, patient flows and ambulance overrides and diverts across Sydney, Central Coast and Inner Hunter. Using modern software integration Tom was able to significantly reduce the complexity of the reporting process. The benefits of this were twofold: the simplified process allowed the user to run the report much more quickly, and its reduced reliance on manual data entry resulted in fewer user errors.

Implementation of Dynamic Cover Tool, Gothenburg Fire Service, Sweden

RSG commissioned ORH to provide the DCT in the region of Gothenburg to aid dispatching officers in making the best decision in response to an incident. Tom was the main data contact and analyst for the project, which involved breaking down exactly what the client required through a language barrier and delivering a high-quality software solution. RSG now use the DCT to help plan for everyday eventualities as well as major events in Gothenburg and the wider region, which encompasses a broad range of geography and rurality.

Base Review of Paramedic Services, Bruce County Paramedic Services, Ontario

BCPS commissioned ORH to provide a comprehensive 10-year master plan for the service, accounting for increases in ambulance call demand, response time targets and the facilities and resourcing requirements for future years. Tom was involved for the entirety of the project, collecting and analyzing the data, modelling future scenarios and presenting recommended phasing of efficiencies to the service.

Capacity Review, North West Ambulance NHS Trust, UK

Following on from a previous review that ORH completed, NWAS implemented some of the recommended deployment changes but wanted to understand how the underlying assumptions had changed since the initial review and the subsequent impact on national response standards. Tom analyzed historical incident data, compared options to previous outcomes and modelled options for change across the three operational areas in NWAS. The results of this were put forward to commissioners and used in funding calculations and union contract negotiations.



Emergency Service Planning



Optimising Locations



Software Solutions

FIND OUT MORE

You can find out more about
our range of services at:

www.orhltd.com

If you would like to talk to one
of our consultants please call:

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