

Police and Crime Panel 15th November 2018

Project Odyssey – An Evidence Based
Approach to Understanding and
Managing Demand



Presentation Objective

To provide an update regarding the progress of
Project Odyssey

The Constabulary's evidence based approach to better understand and manage current demand and predict future demand. Thus enabling the effective and efficient alignment of resources to best deliver the PCC Community Safety and Criminal Justice Plan with a workforce that has both the capacity and capability to do so.

Project Odyssey - Building Blocks

Built upon principles within the PCC Community Safety and Criminal Justice Plan including a focus on:-

- *Protecting Local Policing Model – Building on success*
- *Releasing time for Neighbourhood policing*
- *Effective response to victims*
- *Improving proactive ability to reduce crime*
- *Improving efficiency of local policing*

Updates tonight will include:-

- Intervention Operating Model Review
- Neighbourhood Policing Model
- Hertfordshire Neighbourhood Harm Index
- Force Control Room – Including Initial Resolution Unit and appointments system
- Crime Investigation Model

Background



HMIC 2016 Efficiency Report



Requires Improvement

Hertfordshire Constabulary does not yet have a comprehensive understanding of demand; it does recognise that more work is needed to enable it to reduce demand, increase productivity and effectively plan for the future. It fully recognises that it needs to improve in this area and some positive progress is evident, but more work is needed.

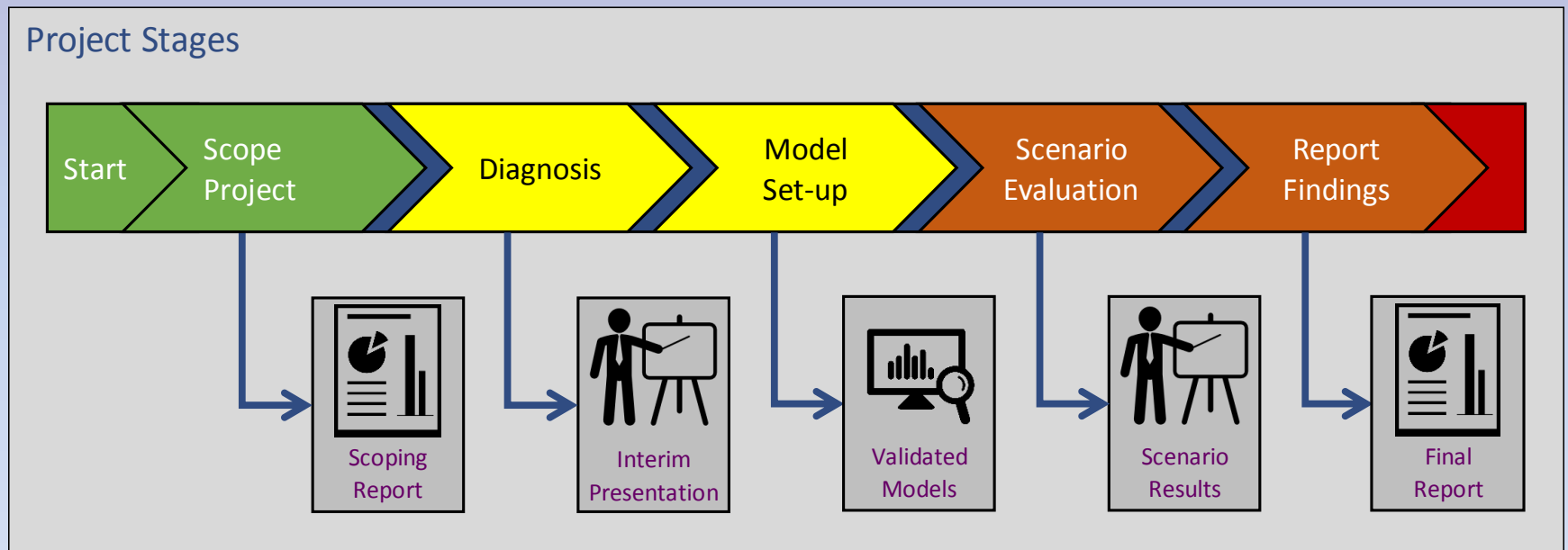
HMICFRS 2017 Efficiency Report



Good

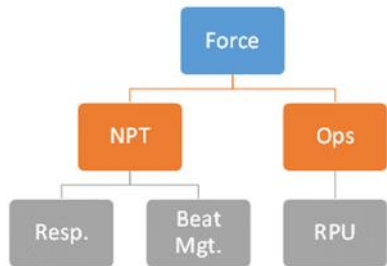
Hertfordshire Constabulary is making good progress in understanding the current demand for its services. It has recently commissioned external expertise and purchased analytical systems to improve its assessment of current, complex and future demand, which will inform options for a new policing model

Methodology



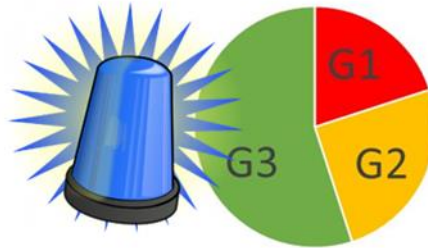
Modelling – some big data sets

Structure



Number of teams
Supervisory ratios

Incidents



Grade and geography
Attendance rate & duration

Geography



Force structure
Population density
Road network

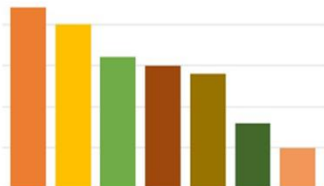


Schools



Pubs & Clubs

Crimes



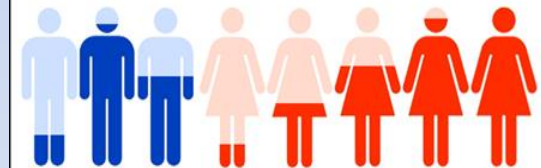
Type and geography
Attendance rate & duration
Investigation rate & duration

Resources

Skills
Core tasks
Other tasks
Abstractions
Budget



Demographics



Income

Employment

Age



Response Operating Model

**Protecting Local Policing
Increasing Efficiency of Local Policing
Effective Response to victims**

Working Assumptions

Good Performance (Customer Service Levels)

- 85% of Emergency incidents within 15mins
- 80% of Priority Incidents within 60mins

Demands on staff

- Officers Utilisation between 70-80%

Efficient Shift Pattern

- Demand Match between 80-85%

Diagnostic Key Themes


Five key themes have emerged from the Diagnostic:-

- Incidents
- Attendance
- Processes
- Resourcing and Shift Pattern
- Crime

Incidents summary

 +9%

Increase in overall incident demand

 +8%

Growth in incidents requiring attendance

 -10%

Drop in volume of incidents with time sensitive targets (15mins / 1hour)

x2

Largest CSP has over twice the volume of the smallest



Emergency profile peaks consistent with the night-time economy

Attendance Summary

No Change

Attendance rates are flat for last 3 years



35

deployments / per day

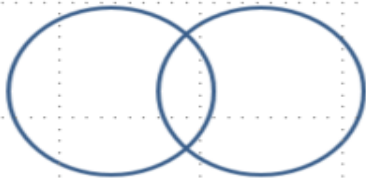
Increase in deployments per incident

?

Seems to be a difference in the way
Double Crewing is applied across CSPs



Large range in proportion of
attendances being done by Intervention



Limited amount of Cross border aid
amongst CSPs

Process Summary

No Change

Dispatch time remains flat over 3 years

No Change

Arrival times remain consistent

 7%

Increase in time at scene for Emergency incidents

All CSPs

Increase in time at scene across all CSPs

83%

Current performance for Emergency

15.9pt variation

Emergency Performance varies between CSPs

Significant variation

Beats across the force experience very different levels of performance

Resourcing Summary

The original Herts 99 shift pattern does not provide a good match to demand at 58.4% (no split shift)

Process Scenarios

**Increasing Efficiency of Local Policing
Effective response to Victims**

Double Crewing Ratios

- Quick wins
- Good performance gains
- Already in traction

Option	Emergency		Priority		Utilisation	
	Performance	Change	Performance	Change	Utilisation	Change
Budgeted FTE 500	79.7%		51.9%		85.7%	
Reduce Crewing Ratio 10pts	80.6%	+0.9pts	60.4%	8.5pts	82.4%	-3.3pts
Reduce Crewing Ratio 20pts	82.3%	+2.6pts	68.2%	16.4pts	78.7%	-7.0pts

Dispatch Area and Emergency Incidents

- Retaining the current CSP structure, officers are now able to go to all incidents within their own CSP + those within X minutes for Emergency Incident

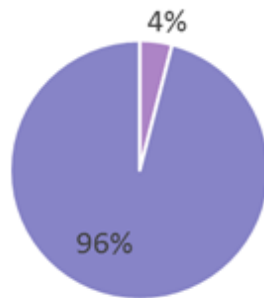
(For Priority, Scheduled and Appointments officers would stay within own CSP)

Option	Emergency		Priority		Utilisation	
	Performance	Change	Performance	Change	Utilisation	Change
Budgeted FTE 500	79.7%		51.9%		85.7%	
CSP + Incident within 5mins	79.6%	-0.1pts	51.5%	-0.4pts	85.7%	0.0pts
CSP + Incident within 10mins	80.1%	+0.3pts	52.7%	+0.8pts	85.7%	0.0pts
CSP + Incident within 15mins	83.7%	+4.0pts	56.3%	+4.4pts	86.2%	+0.5pts
CSP + Incident within 20mins	79.7%	0.0pts	57.4%	+5.6pts	86.9%	+1.2pts
CSP + Incident within 25mins	72.8%	-6.9pts	56.9%	+5.1pts	87.7%	+2.0pts
CSP + Incident within 30mins	66.8%	-13.0pts	55.6%	+3.7pts	88.3%	+2.6pts

- Outputs show that providing some ability to cross-borders can be beneficial but when travel times are widening above 15mins performance deteriorates

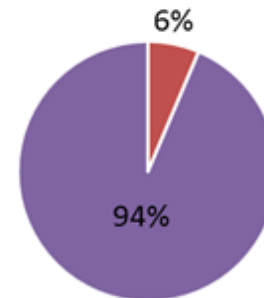
Cross-Border Analysis

2017 Cross Border and Non Cross Border



- 2017 Total Cross Border Incidents
- 2017 Prompt & Immediate Incidents non Cross Border

2018 Cross Border and Non Cross Border



- 2018 Total Cross Border Incidents
- 2018 Prompt & Immediate Incidents non Cross Border

Other tasks

➤ 41% of their time working on 'other tasks'

Option	Emergency		Priority		Utilisation	
	Performance	Change	Performance	Change	Utilisation	Change
Budgeted FTE 500	79.7%		51.9%		85.7%	
Reduction - 10%	79.2%	-0.5pts	54.5%	+2.7pts	84.0%	-1.7pts
Reduction - 20%	79.2%	-0.5pts	59.0%	+7.1pts	82.3%	-3.4pts

- Scene Guards
- Hospital watches
- Mental Health Triage

Alternative Structure Scenarios

Protecting Local Policing
Effective Response to Victims
Increasing Efficiency of Local Policing

Dual District – 1 deployment base

Metric	Base Performance	Scenario	Variation
Emergency	79.7%	72.0%	-7.8%
Priority	51.9%	67.0%	+15.1%
Utilisation	85.7%	83.0%	-2.7%

Deployment Hubs

- Hemel Hempstead
- Watford
- Hatfield
- Stevenage
- Cheshunt

Shift Pattern Design

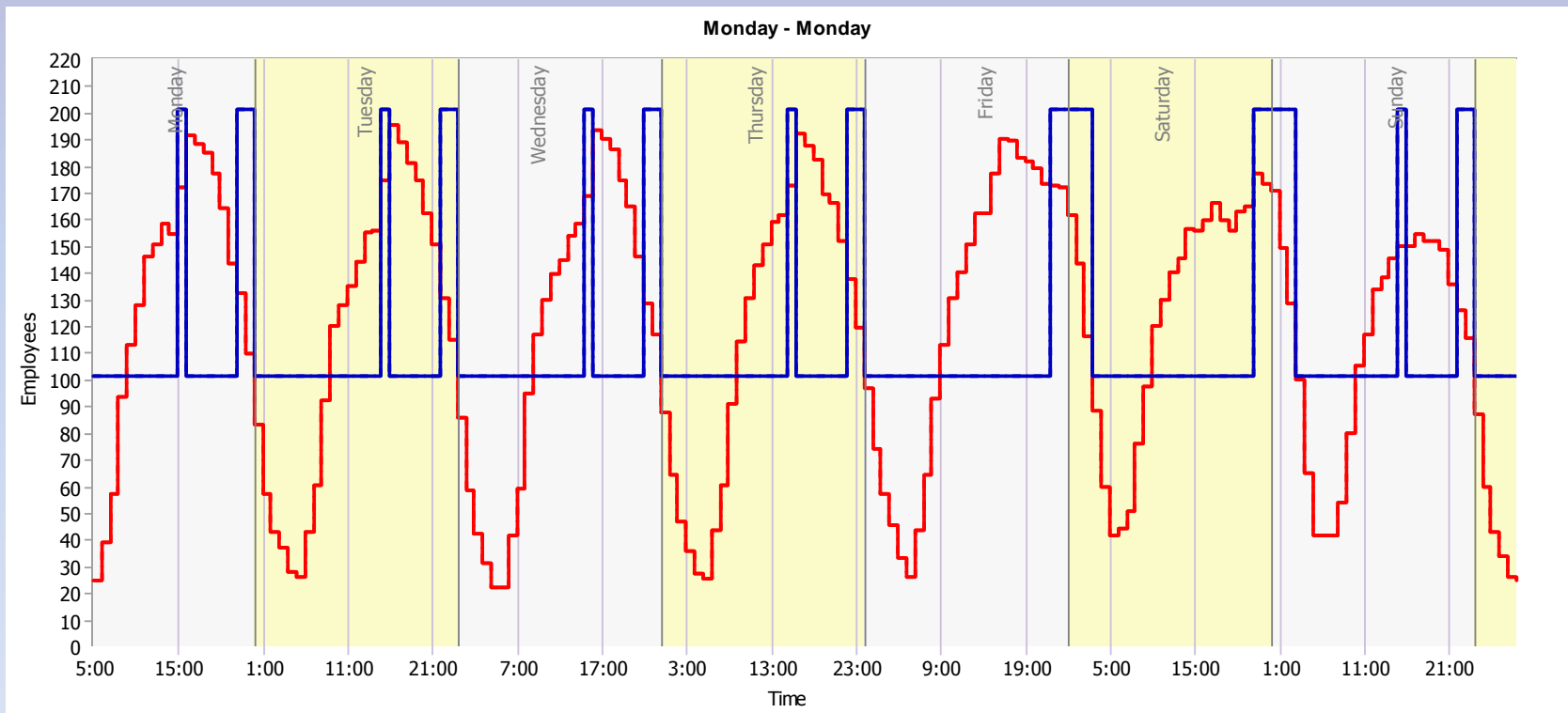
**Increasing Efficiency of Local Policing
Effective response to Victims**

Design Principles

- Provide a rota for FTE consistent with the Force establishment number which could be split into equal teams
- Provide as good match to demand (Minimum Numbers)
- Meets working time directives
- Takes account of Force and Officer preferences
- Risk and Fatigue levels measured against HSE Index
- Uses shifts between 8-hours and 10-hours in length, no 12 hour shifts
- No single rest days
- Provides a training day at regular intervals

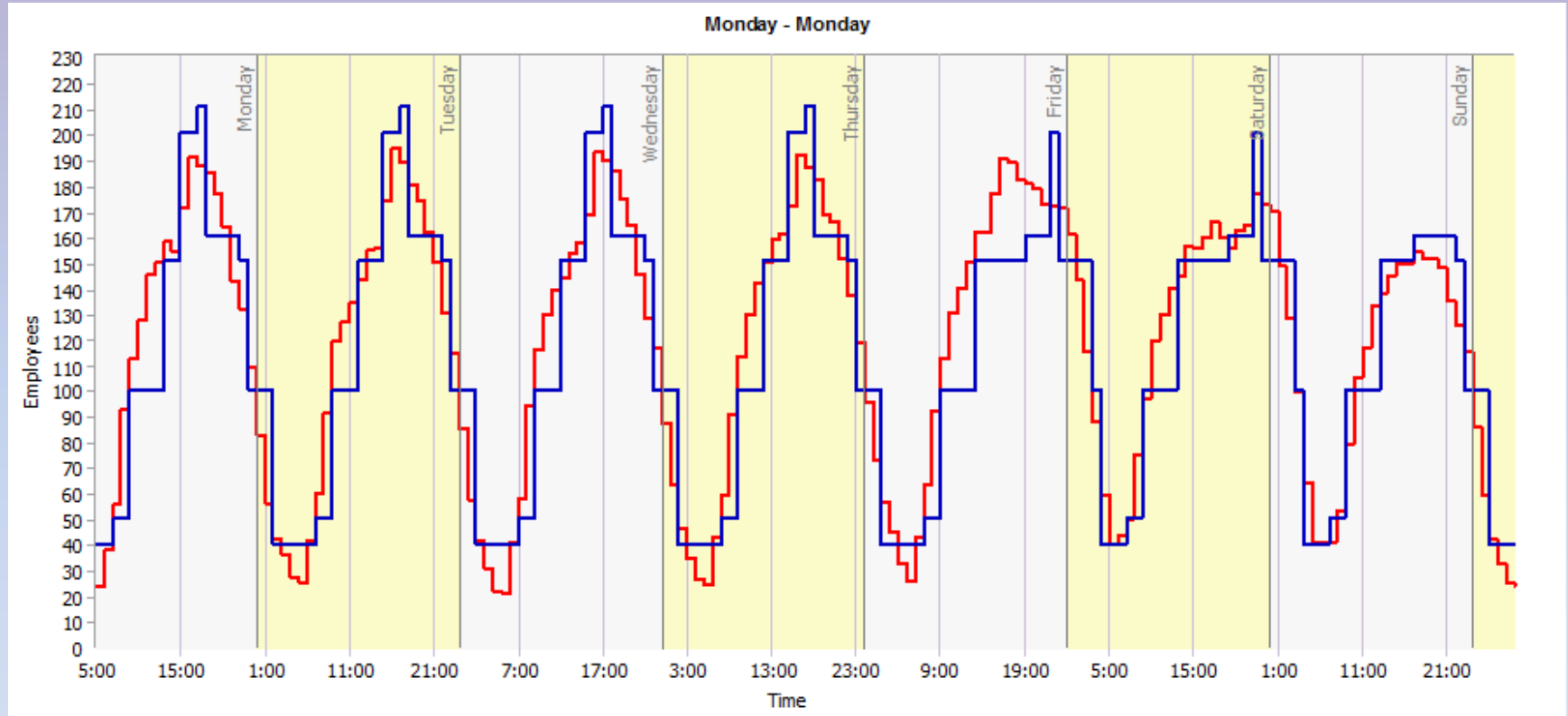
Herts 99 Shift Pattern Vs Demand

- Poor match to demand **56.7%**
- High number of resources on duty, at times of low demand



Blue line = Resources. Red Line = Demand

Potential Shift Pattern



Match to Demand 78.5%

Neighbourhood Policing Model

**Protecting Local Policing
Increasing Efficiency of Local Policing
Releasing time for Neighbourhood Policing
Improving proactive ability to reduce and prevent
crime in Partnership**

Neighbourhood Policing Model

Purpose and Scope -

- Provide a baseline of current SNT activity and its alignment with the SNT role definition
- Maintains Local SNT Policing Model
- Retains 10 CSP & local government structure
- Develop a mechanism for allocating SNT resources in line with force priorities and drivers of demand that align with the SNT role
- Determine the resource allocation using this mechanism for an agreed financial scenario whilst considering outputs from the response work (Combination of Harm Index and PBB)
- Provide the Force with a tool for running further scenarios

Priority Based Budgeting

6 SNT Capabilities

<p>Reducing Crime and Anti-Social Behaviour</p> <p>Effective Problem Solving</p> <ul style="list-style-type: none"> Find sustainable solutions to long-standing problems Work collaboratively with partners, public and other agencies to resolve issues effectively Understand, identify and take action to tackle signal crimes and signal incidents* e.g. graffiti and minor damage Maximise public satisfaction Own and resolve problems <p><small>* A crime or incident often minor, which can disproportionately affect fear or concern within communities.</small></p>	<p>Catching Criminals</p> <p>Proactive Enforcement</p> <ul style="list-style-type: none"> Attend and investigate crime Arrest offenders – bring them to justice Seek out intelligence about criminals Effectively tackle anti-social behaviour Provide reassurance through visible activity Take responsibility for local crime and criminals 	<p>Keeping People Safe</p> <p>Protecting Communities from Harm</p> <ul style="list-style-type: none"> Identify vulnerable people and repeat victims and help protect them from harm, including anti-social behaviour Work with specialist units to effectively manage offenders. Know how communities normally feel and identify local tensions and those who may be at risk from radicalisation by extremists (Prevent Strategy) Conduct effective victim follow-up visits – assess vulnerability, provide crime prevention advice and signpost to other agencies 	<p>Contact with a Purpose</p> <p>Purposeful Engagement</p> <ul style="list-style-type: none"> Undertake at least one engagement activity each month e.g. Neighbourhood Surgery, Street Meet, Public Forum Help to shape the Neighbourhood Priorities by listening to the views of local communities Build proactive engagement into daily activity Maximise opportunities to have face to face contact with people 	<p>Getting others Involved</p> <p>Capacity Building</p> <ul style="list-style-type: none"> Maximise opportunities to share the work with others Develop Neighbourhood and Business Watches Identify organisations suitable for the Community Safety Accreditation Scheme* Engage with Volunteers and the Special Constabulary Help communities look after themselves <p><small>* Community Safety Accreditation Scheme is a means by which the Chief Constable may grant a limited range of powers to employees of non-police organisations who contribute towards community safety.</small></p>	<p>Listening and Understanding</p> <p>Understanding Communities</p> <ul style="list-style-type: none"> Use Key Individual Networks* to know and understand communities Identify emerging communities Use all available information to understand local community demographics Look out for variations in the demand for local services and amenities which may indicate changes in community demographics Build contacts with local employers Keep people informed <p><small>* Influential individuals e.g. councillors or any other person such as shopkeepers who are well placed to help police understand community issues.</small></p>
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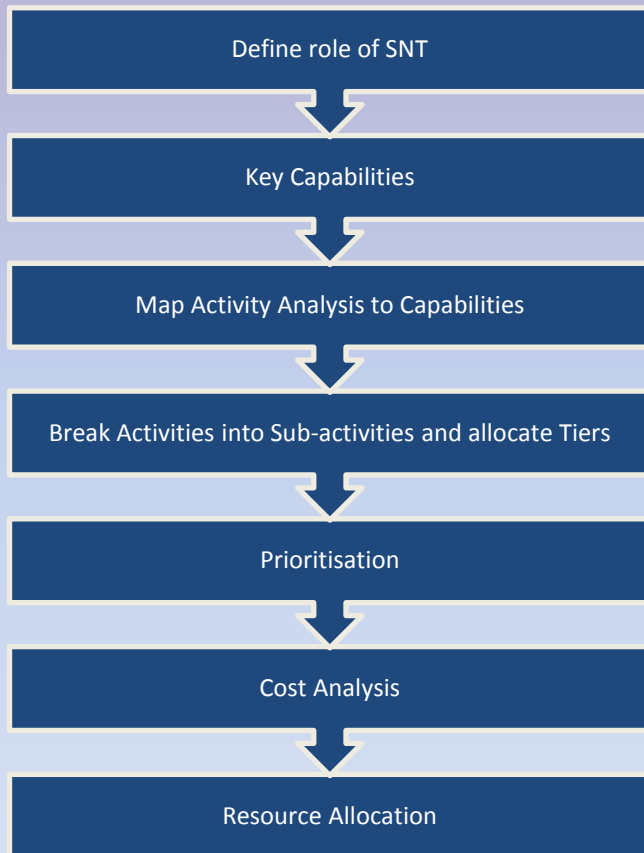
6 Capabilities

- Effective problem solving
- Proactive enforcement
- Protecting communities
- Purposeful engagement
- Capacity building
- Understanding communities

3 additional streams

- Responding to Incidents
- Other Policing Activity
- Administration

Overview of the PBB Neighbourhood Profiler Process



- The process started with the definition of the role of SNT in Hertfordshire
- Workshops with Chief Inspectors and Inspectors mapped current activities onto the key capabilities
- Detailed understanding and prioritisation was conducted by the same officers in further workshops
- Analysis of SNT activity returns was used to baseline the cost of the various types of work based on the time spent on them
- Resource allocation was then determined based upon the demand drivers of the prioritised, in-budget activities

Hertfordshire Neighbourhood Harm Index

Hertfordshire Neighbourhood Harm Index

Development of a Neighbourhood Harm Index to inform allocation of resources based on SNT being the building blocks of the policing model

- Allows predictive modelling around community needs
- Reactive to change - strategic direction PCC CS and CJ Plan
- Victim focused
- Incorporates various metrics
- Interprets large data sets and what this means for policing and the citizens of Hertfordshire
- Provides informed products to local CSP commanders

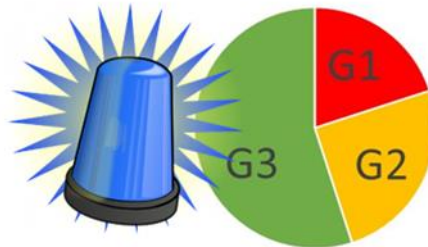
Neighbourhood harm index – some big data sets

Harm

Cambridge Harm Index
Harm vs. Volume
Victim focus



Incidents



Grade and geography
Attendance rate & duration

Geography



Force structure
Population density
Road network

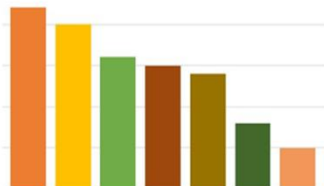


Schools



Pubs & Clubs

Crimes



Type and geography
Attendance rate & duration
Investigation rate & duration

Partnership and ONS Data



NHS admissions
(Cardiff Model)
Deprivation Index

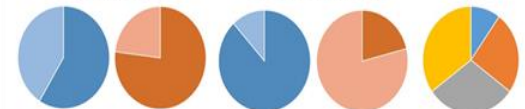
Demographics



Income

Employment

Age



Current Projects

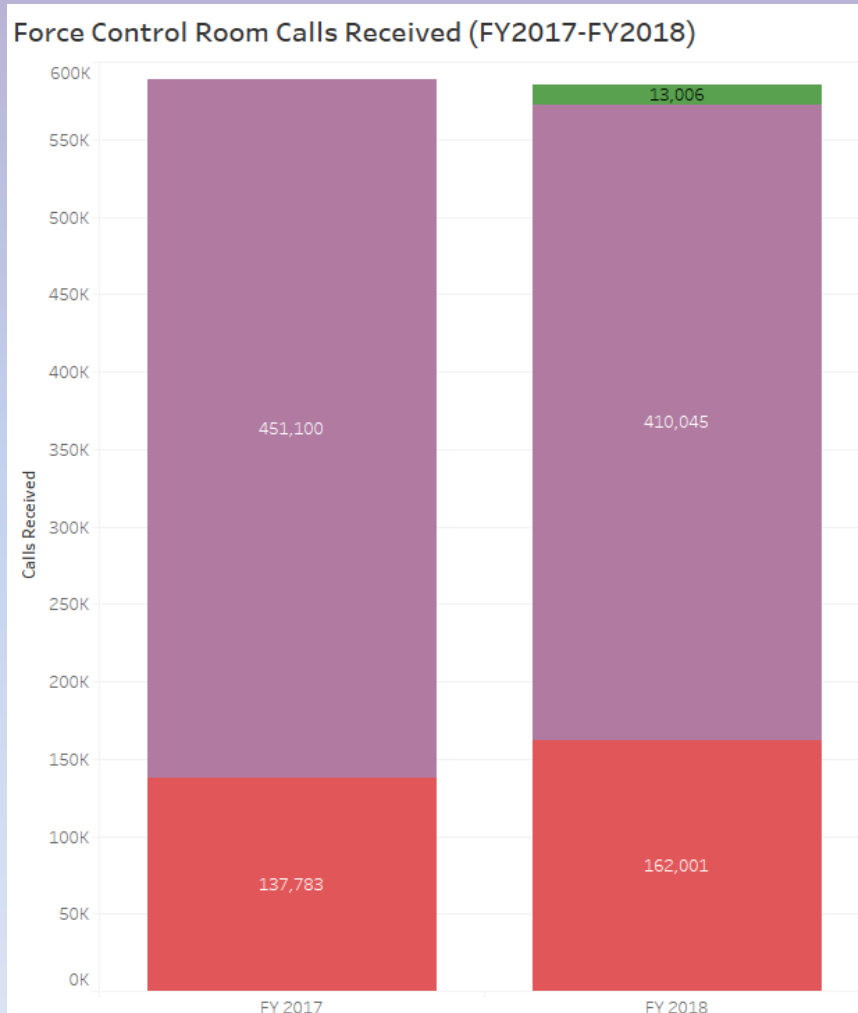
November 2018 onwards

Project Odyssey – FCR review

Including.....

- Target Operating Model
- FCR structure (management / line management)
- Staffing (including levels, Training and Development)
- Current practices – process evaluation and efficiencies
- Shift patterns – Designed and in consultation with staff
- Demand - profile obtained
- Service levels – Improving performance measures
- Opportunities for savings and / or reinvestment

Call Volume and Trends 2017 – 2018



Total Calls have reduced by 0.7% between FY 2017 and FY 2018

Reduction of 3,831 calls

Growth in 999 calls with reduction in 101 call volumes

Emergence of Other channels e.g online report

Are people now more likely to call 999 than they were previously?

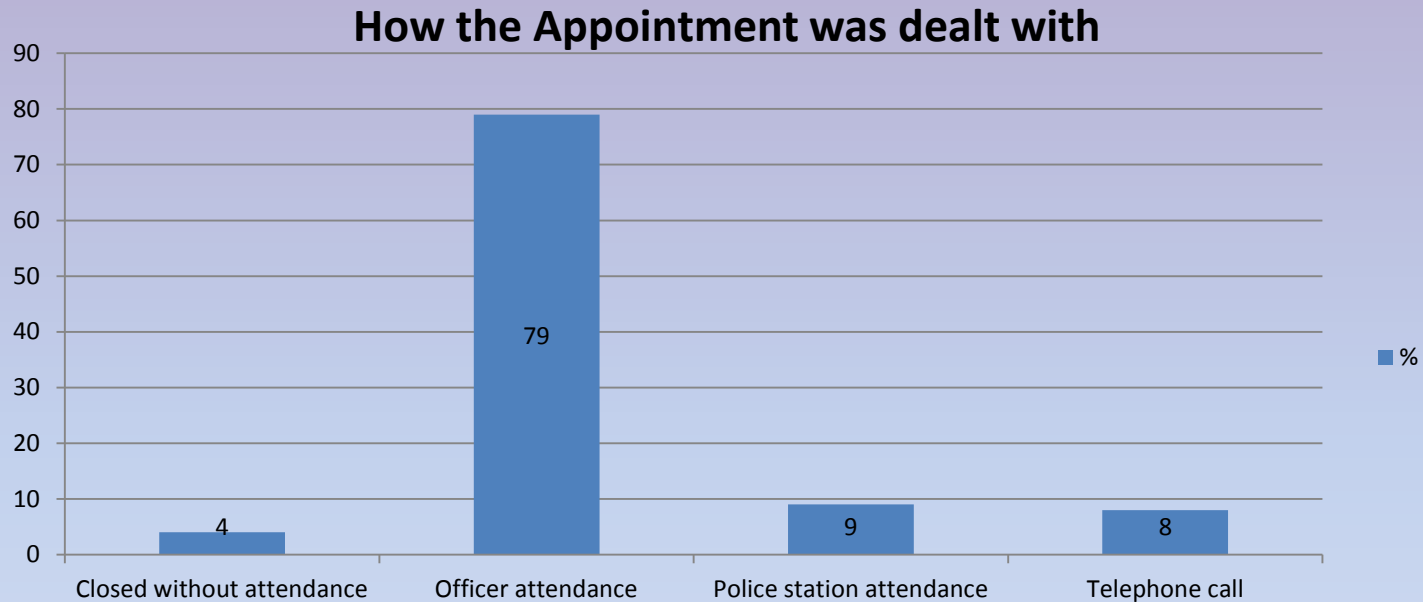
Station Appointments – Improving police contact.

Enhanced diary car appointments systems from May 2018.

Hertfordshire residents can choose their appointments venue from:-

- Attending a Police Station
- Diary Car to Home Address

A dip sample of over 240 Hertfordshire Incidents indicate that police attended the address of the caller 79% of the time.



Recent sample indicated that the vast majority of customers prefer the diary car than visiting stations

Incident Resolution Team

- An Incident Resolution Team (IRT) will enable us to ensure an appropriate service to victims based on a proportionate response to threat, risk and harm
- A trial is due to begin at the end of November 2018.

Crime Management – Review

The aim of this review is to carry out an analysis of demand within crime management and investigative teams across both the Local Policing and Safeguarding Commands.

- Current and future demand analysis
- Current policy and practice including service levels
- National best practice and evidence base
- Processes and Efficiencies
- Training and development of staff
- Options for crime management and investigation delivery to include: Allocation of resources, Staffing levels, Shift patterns

Thank you

Any Questions?