

# OSNI Seminar

## Northern Ireland Ambulance Service Case Study

July 2007



# Contents

Overview and Remit of the SIB

Case Study

- Benchmarking
- Workshop/s
- Statistical analysis



## Strategic Investment Board Limited (SIB)

- **est. 2003**
- **company limited by guarantee**
- **wholly owned by NI Government**
- **15 professional staff, £9m budget**
- **bridge between public & private**

## Remit of SIB - centre of delivery expertise

- projects & programmes
- foster reform
- investment strategy (ISNI)



 **Fresh thinking...Benchmarking**

# Case Study - NIAS

NIAS & SIB review the strategic plan

## Objective

- A challenge function
- National / International comparison(s)
- Strengths and weaknesses

## Use of a Facilitator

- Identify expert in the field
- Compile a benchmarking report

## SIB & NIAS workshops

- Consider the outputs
- Determine the best way forward
- Modify strategy

# Workshop Discussions

## Benchmarked Outputs (Main Driver)

- National Target 75% Cat A in 8 min
- NIAS Achieving approx 55%

## Resources (Main)

- 60 Ambulances and 10 RRV's (similar to Benchmark partner)
- Approximately 30 Stations across Northern Ireland

## Workshop Output

### New Strategy

- High performance Ambulance Service Model Identified and Adopted
- Commence work on identification/specification of the infrastructure to support the service delivery

# NIAS - Existing





 **Analysis ... How to meet the Need**

# Analysis to meet the Need

Identified the main constraints to faster service

- one constraint - time from Ambulance station to incident

Solution - increase deployment points across Northern Ireland

- ? Where should we locate them
- Should be based on need

Appointed Tony Hindle to conduct an analysis of need –

# Statistical model

## Four Components

- User Inputs – demand, activation times, response times, resources etc.
- Data Inputs – incident rates per Census Output Area, COA centroids, hospital locations etc.
- Mathematical Models – built in equations to calculate optimal locations and response performance
- **MapPoint** Functions – mapping instructions, drive time and distance matrices, identification of road junctions, drive time zones etc.

# Approach

- GIS road network
- overlay Census boundaries
- overlay populations

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- create domain 'accessibility' indices
  
- aggregate indices to higher levels

# Output

<b>Plan 3</b>	<b>60 DP</b>	<b>8 minute target</b>		<b>18/21 minute target</b>	
<b>Board</b>	<b>Demand</b>	<b>ALL</b>	<b>CAT A</b>	<b>ALL</b>	<b>CAT A</b>
East	45,437	68%	75%	97%	98%
North	22,640	55%	65%	95%	96%
South	14,165	54%	64%	95%	96%
West	12,758	57%	66%	95%	97%
<b>Overall</b>	<b>95,000</b>	<b>62%</b>	<b>70%</b>	<b>96%</b>	<b>97%</b>

<b>Plan 4</b>	<b>120 DP</b>	<b>8 minute target</b>		<b>18/21 minute target</b>	
<b>Board</b>	<b>Demand</b>	<b>ALL</b>	<b>CAT A</b>	<b>ALL</b>	<b>CAT A</b>
East	45,437	74%	78%	97%	98%
North	22,640	64%	71%	96%	97%
South	14,165	62%	70%	96%	97%
West	12,758	65%	72%	96%	97%
<b>Overall</b>	<b>95,000</b>	<b>68%</b>	<b>74%</b>	<b>97%</b>	<b>98%</b>

# NIAS – Hindle 60





**Driving efficiencies ... in Service Delivery through  
Shared Infrastructure**

# NIAS 60, NIFRS, & PCCI



# Summary

SIB used the enabling budget to:

- Assist in benchmarking exercise
- Develop Ambulance Services strategy
- Identify the optimal locations across Northern Ireland to meet the need
- Consider synergies which may exist and how best to capitalise on them

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