



# Highways



# Transport



# Design



# Maintenance

# Northamptonshire Highway Maintenance Initiative

Paul Hewitt  
6<sup>th</sup> March 2015

# Consultancy



# Northamptonshire Highways?

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The partnership between  
Northamptonshire County Council  
and  
KierWSP

Providing high quality highways and transport services to the people of  
Northamptonshire.

We will listen to what they say; act as one team; provide value for money  
and on-time delivery.

KierWSP





# KierWSP – the company

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Non-incorporated joint venture between:

## Kier

- National infrastructure company specialising in highways, environmental and utility services
- Major LA highway services contracts include Lincolnshire, Suffolk, Surrey and East Sussex

## WSP

- International consultancy working in over 35 countries – the largest in the world
- Specialising in the built environment
- Relevant skills in highway design, structures, transport planning and modeling, ITS and environmental



# KierWSP – the company

Integrated services contract commenced March 2008

## Key features:

- 8 years extended to 12year 2008 to 2020
- Actual cost/target cost
- Total value of £550 million
- Annual value £40 million - £50 million
- Around 400 employees
- Lean client – prioritisation and budget management is with KierWSP
- Effective collaboration essential for success



# KierWSP – the company

## Northamptonshire Highway Network

- 4,200km carriageway network
- 3,000km footway network
- 124,000 highway gullies
- 447 bridges / 158 footbridges
- 3,065km rights of way network
- 422 signalised junction approaches





# Northamptonshire Highway Maintenance

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Why was change needed?

- Deteriorating network condition
- Repair quality
- Reducing budgets



# Northamptonshire Highway Maintenance

Why was change needed?

- And ultimately ..... WINTER





# Northamptonshire Highway Maintenance

## The Impact?

- 8x more category 1 defects
- Peak of 11,000 defect per month
- 25% increase in the workforce size
- 150% increase in temporary repairs
- Increase in claims
- 16x increase in complaints
- Political and press headlines







# Northamptonshire Highway Maintenance

## The New Approach?

- A planned approach, with longer lasting repairs
- Focus on prevention
- Utilisation of Revenue and Capital budgets
- Understanding and communication



## Northamptonshire Highway Maintenance Initiative



# Northamptonshire Highway Maintenance

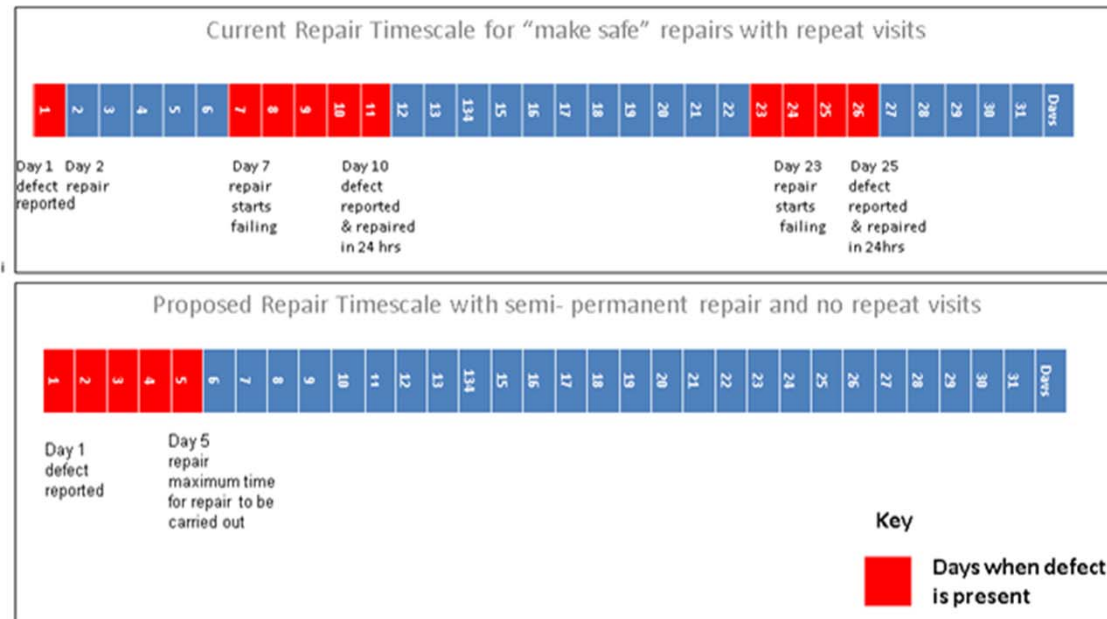
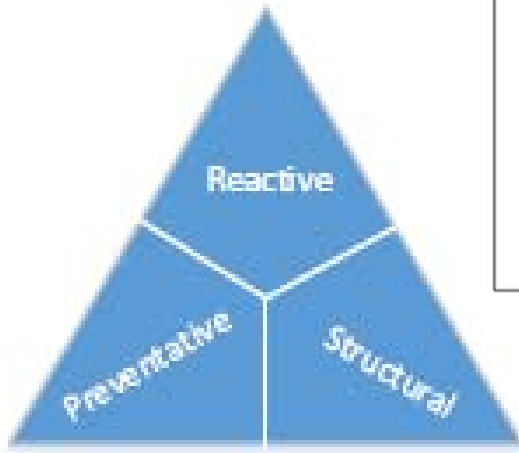
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## Northamptonshire Highway Maintenance Initiative? Two Objectives

- Change the timescales for Cat-1 and Cat-2 repairs
- Move towards a preventative approach to halt further deterioration and maintain a steady state where possible.

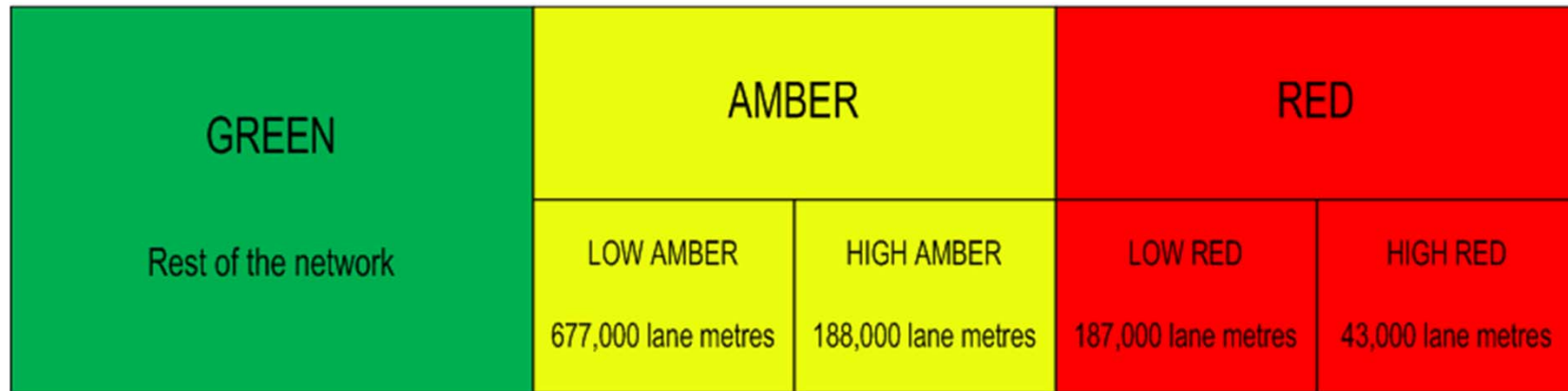
# Northamptonshire Highway Maintenance

## Objective 1



# Northamptonshire Highway Maintenance

## Objective 2

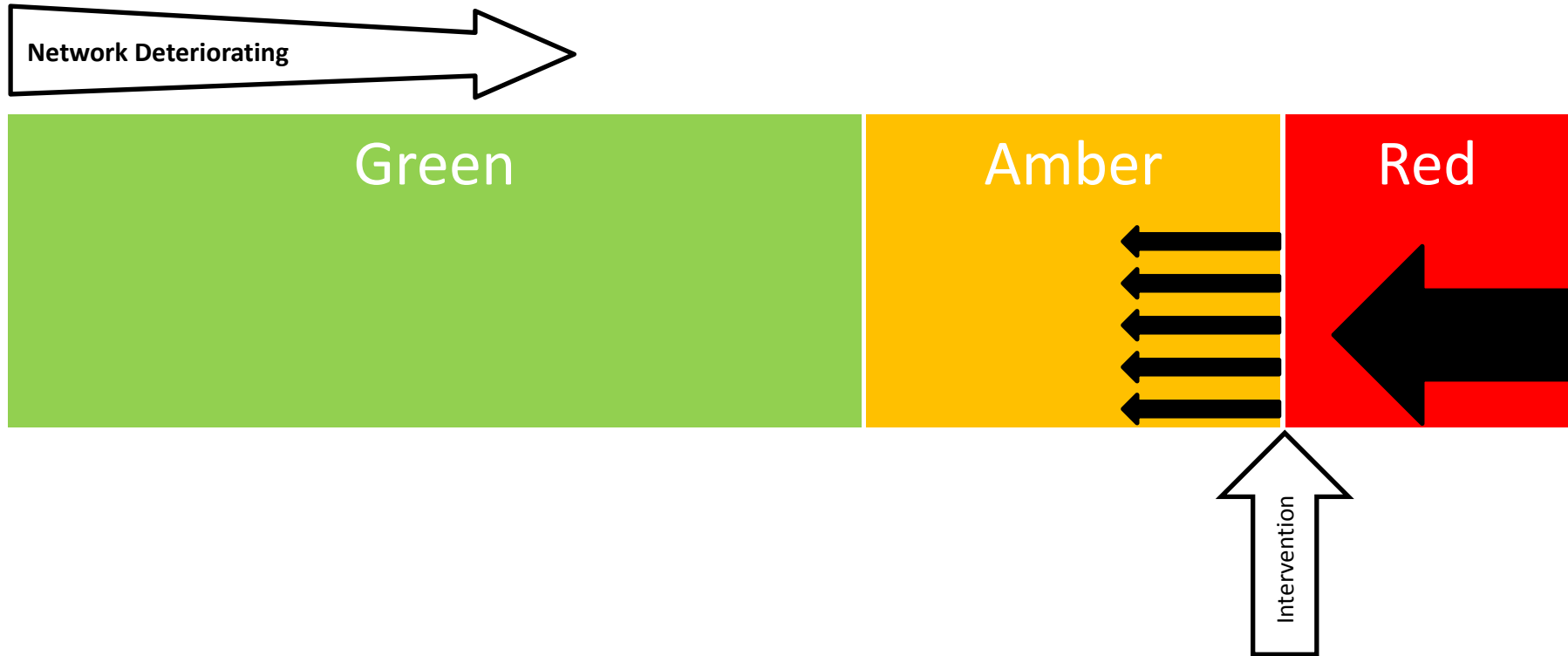


Maintenance Strategy



# Northamptonshire Highway Maintenance

## Preventative Approach





# Northamptonshire Highway Maintenance

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## What have we achieved to date

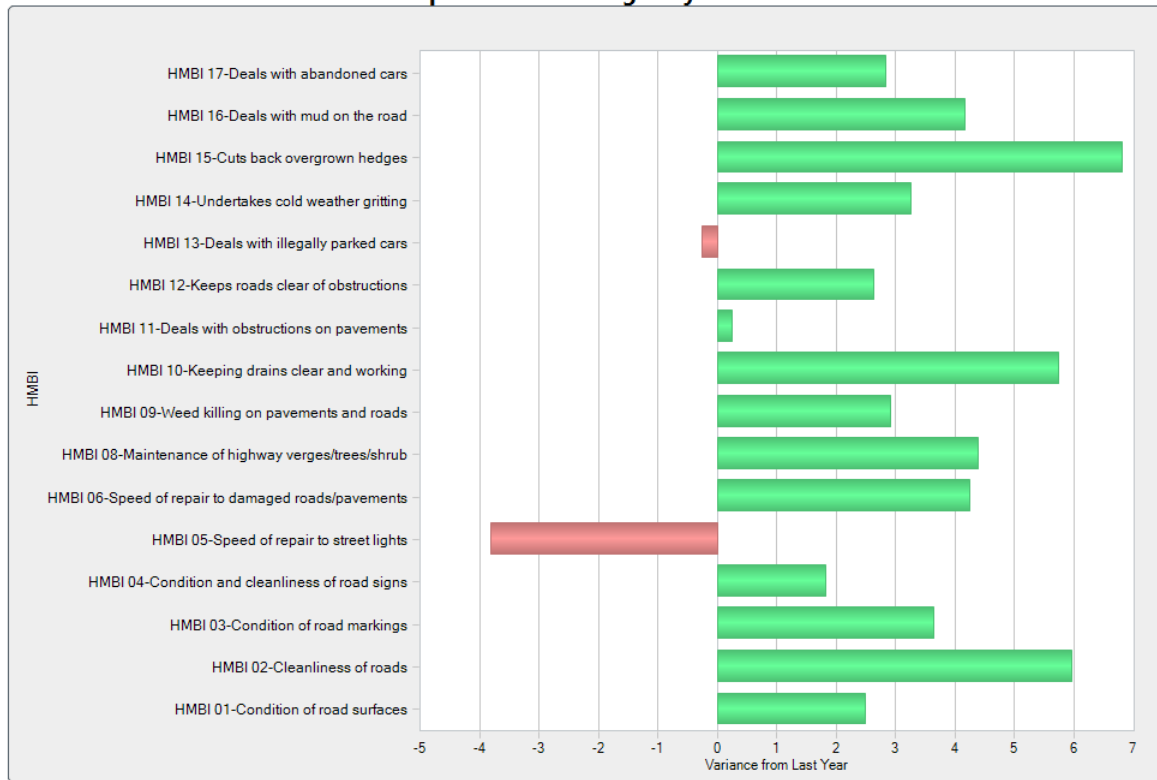
- A substantial increase in permanent/semi-permanent repairs which are in excess of 90% of all repairs carried out.
- Doing more whilst on site – achieved a 9% increase in defects repaired over and above what was identified.
- A reduction in public reported carriageway potholes of 23%
- A 12% increase in repudiated claims
- Reduction in CO<sub>2</sub> emissions. More efficient planning of work has led to less miles travelled and resulted in a £22,000k reduction in fuel use.
- Positive feedback increased.



# Northamptonshire Highway Maintenance

## 2011 NHT Survey

Northamptonshire CC - Highway Maintenance BI's





# Northamptonshire Highway Maintenance

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## Other factors affecting satisfaction ratings

- Asset Management - practical approach
- Zero Based Budgeting - allocate money to needs
- Communications & PR -
- Area delivery - local approach with area teams
- Culture and people - involve all staff in changes
- Control Hub - maximising efficiency
- Contract - facilitates focus on improvement

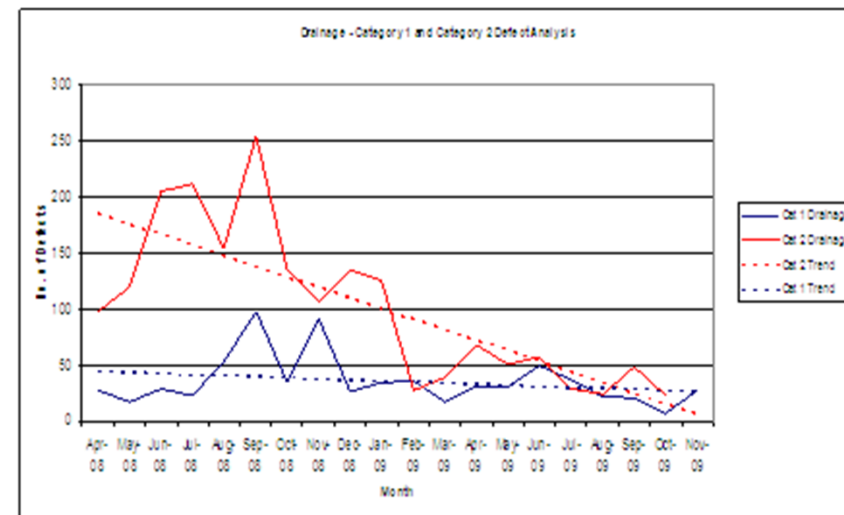




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## Asset Management Approach

- Practical & based around improved systems & data
- Gully maintenance gave significant service efficiencies

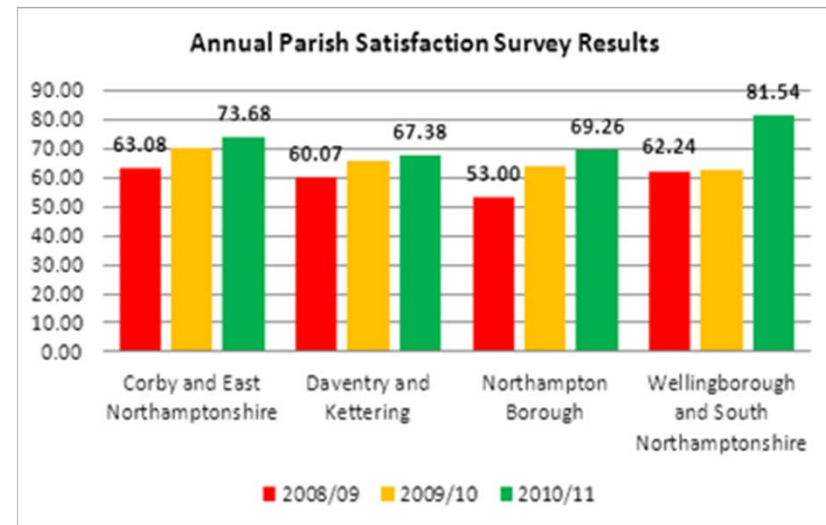




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## Area Delivery / Local Approach

- Area teams with local knowledge, ownership and responsibility
- PEG, CLO, StreetDoctor
- Year on year improvement in parish satisfaction





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## Control Hub

- Focal point for management, co-ordination, information and control
- Ensures effective and efficient delivery
- Significant savings and improved quality of service





# Northamptonshire Highway Maintenance

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## A different service approach and delivery

- A “one-team” and “outcome focussed” approach
- A 3-year change that showed results
- Based on a step-by-step approach... building up data, understanding the data and using technology to drive an improved service.



# Northamptonshire Highway Maintenance

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## The next stages

- The NHMI is now adopted as our day-to-day maintenance strategy
- The concept of prevention is better than cure is embedded in what we do, but will be further developed and embedded
- We reviewed and developed our scheme identification and prioritisation process to align with the new maintenance strategy.



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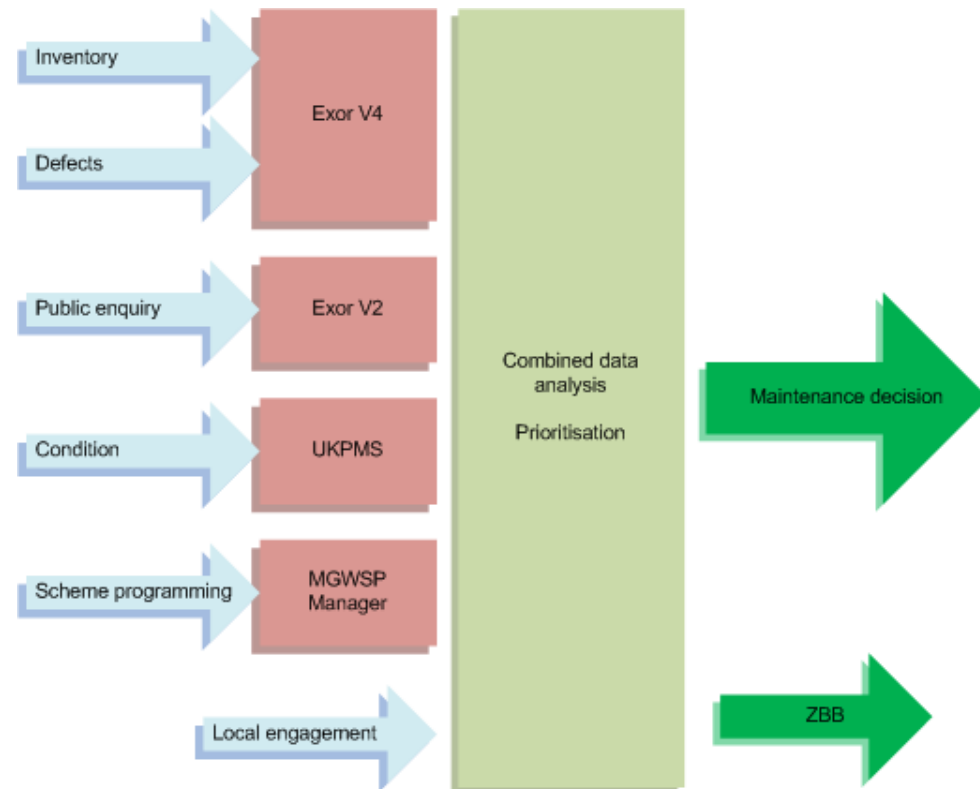
## Scheme Identification and Prioritisation for Future Works Programmes



# Northamptonshire Highway Maintenance

## Our approach now

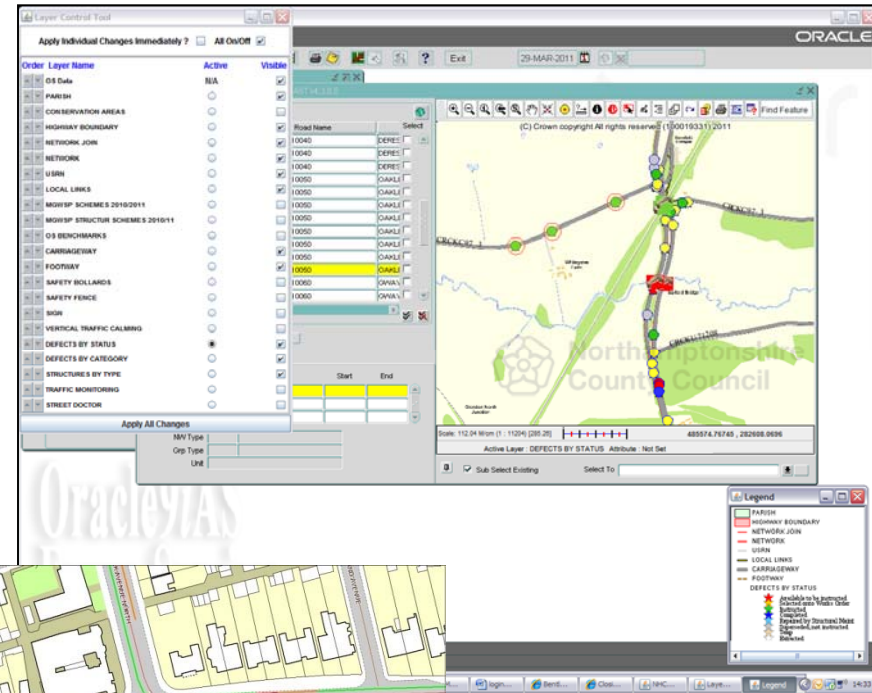
- Inventory
- Defects
- Public Enquiries
- Condition
- Planned Schemes
- Local feedback & knowledge



# Northamptonshire Highway Maintenance

## Our approach now

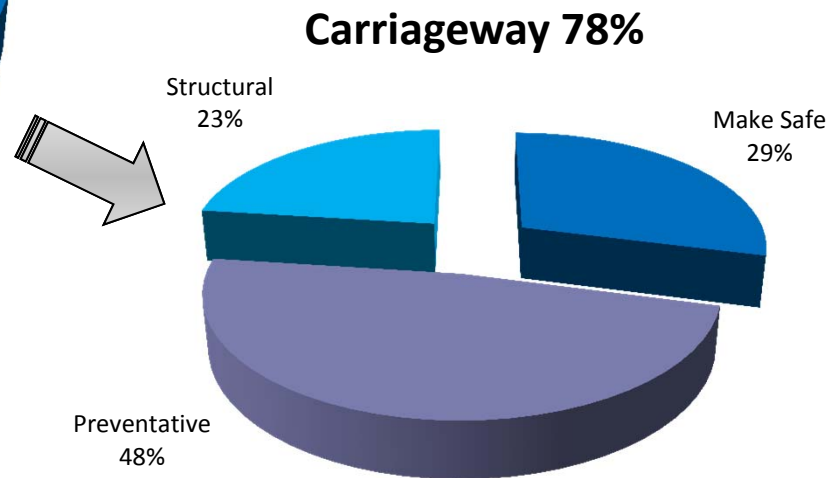
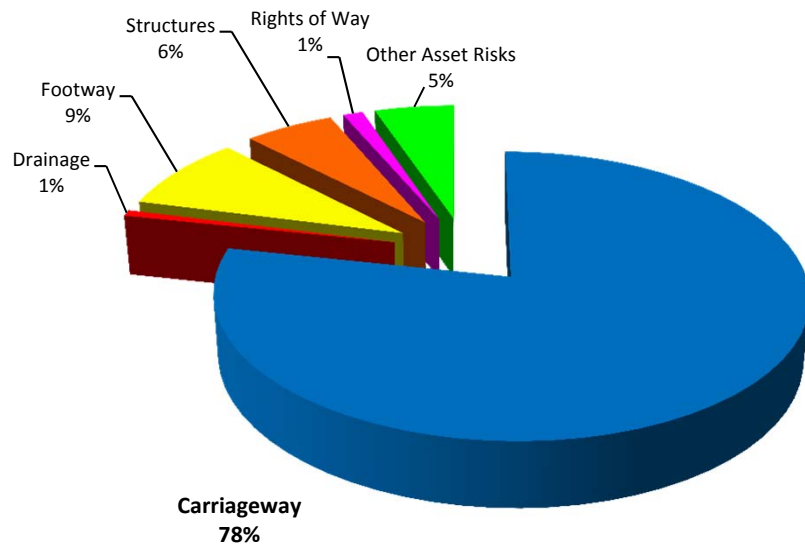
- Defects mapped
- Intervention
- Machine survey data mapped





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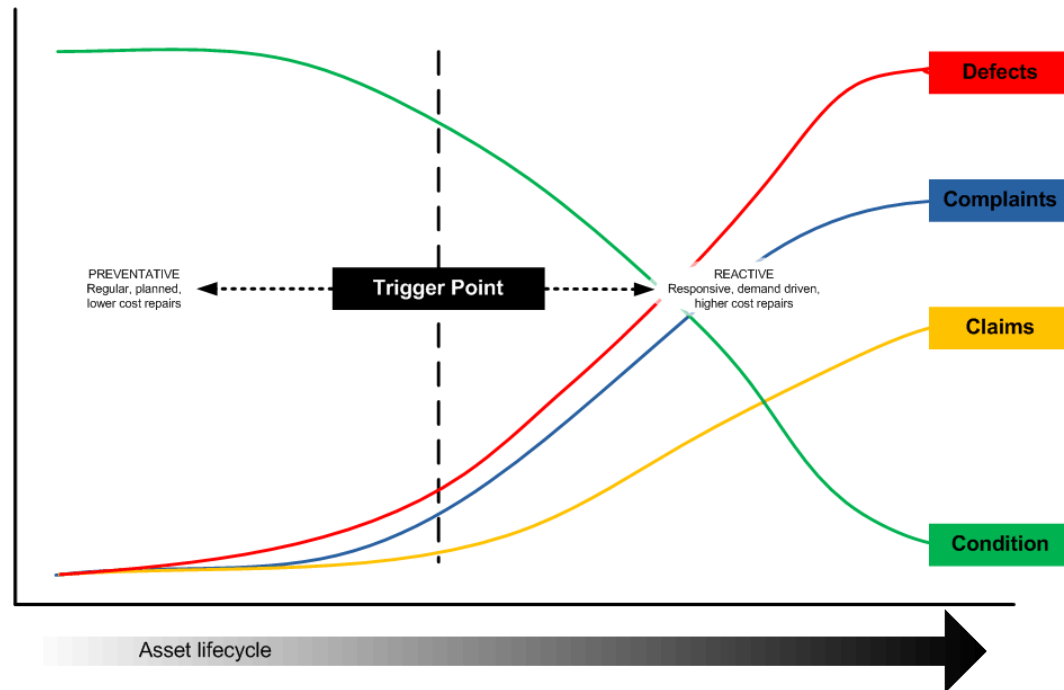
## Budgets



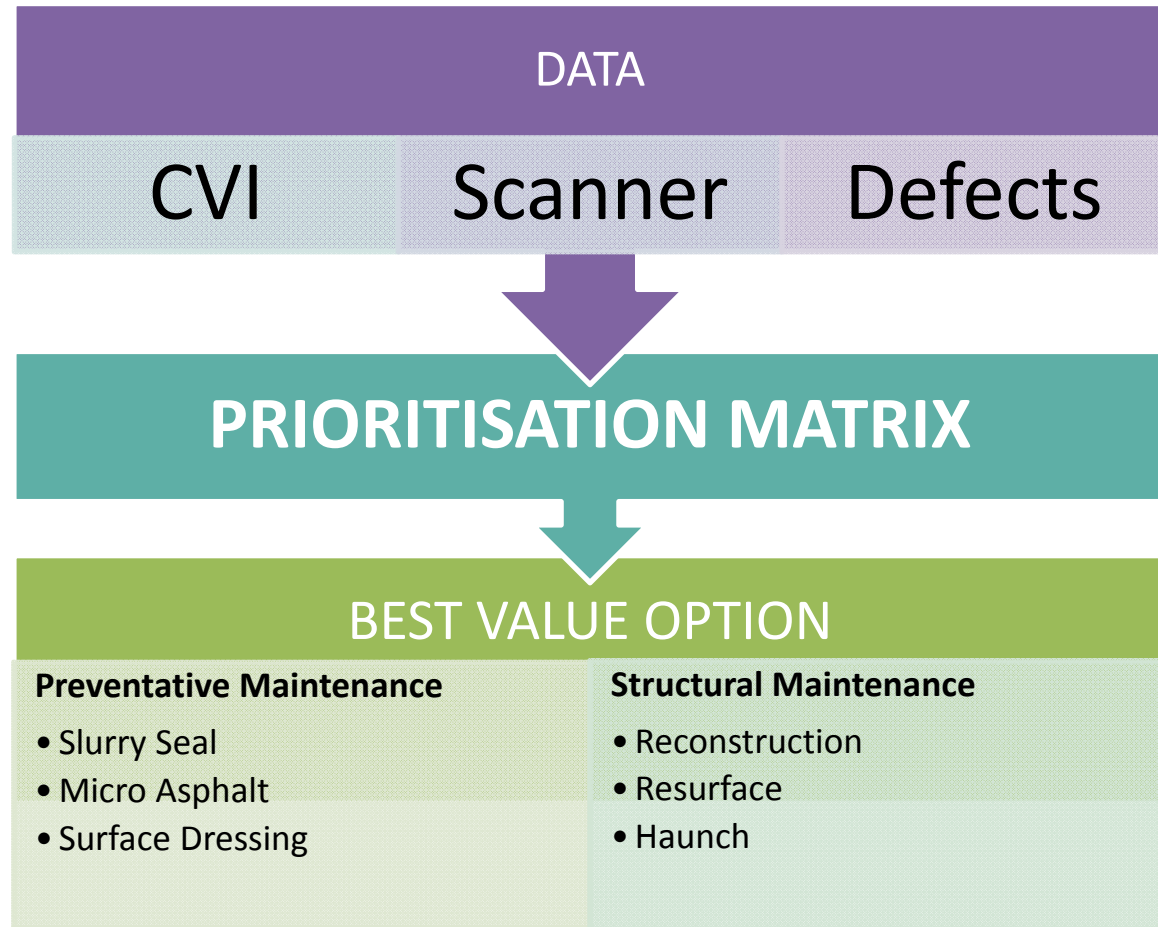
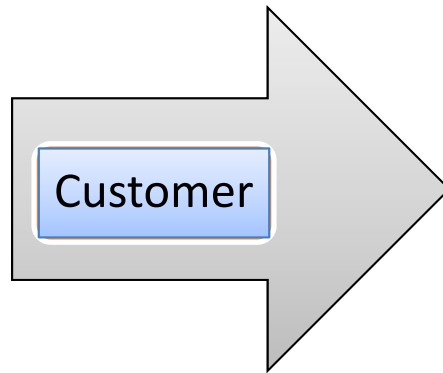
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## Why Prevention is Important

- Data analysis
- Prioritisation
- Design for impact and maintenance.



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## Maintenance Strategy Going Forward

- Our initial focus is on improving the condition of the local network
- The impact of this is that the condition of the strategic road network could deteriorate slightly, but the aim is to maintain its current condition
- Condition data will be reviewed each year and the strategy updated as necessary.



# Northamptonshire Highway Maintenance

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Thank you.