Network Recovery Plan

1 50 1



Highway Investment Model

18th May 2016

Steve Mangan-Team Leader, Network Management & Highway Operations Presentation to APSE Highway and Street Lighting Advisory Group

> Delivering Excellence in the Built Environment



- A Strategy to return the highway network back to a given condition for a given investment.
- Seeks to arrest and reverse deterioration of the highway network by treating the roads at the optimum time.
- Use of both innovative and traditional techniques to deliver cost effective solutions to achieve this.









Asset Management Principles

•Use of SCANNER and CVI to determine overall RCI.

- Understand where we already are (i.e. %age Red, %age Amber, %age, Yellow and %age Green).
- •Understand where we want to be in terms of these percentages and set out the cost/processes to achieve the end target.
- •Ensuring that the correct treatment is delivered at the optimum time.
- •Understanding the depreciation costs of the asset.





"Worst First" is not an option

Overall Carriageway Condition

		% of classification within each category						
Road Class	Rating	2010-11	2011- 12 ¹	2012-13 ²	2013- 14	2014-15	2015- 16 ³	
All Roads	red	9.3	8.4	3.1	6.4	7.8	6.3	
	amber	10.5	10.2	4.7	4.8	5	4.6	
	yellow	37.6	35.7	9.5	12.9	14	13	
	green	42.6	45.7	82.7	75.9	73.2	76.1	

Targe	t % of class	ification wit	hin each ca	tegory
2016-17	2017- 18	2018-19	2019- 20	2020- 21
6	6	6	6	6
3	3	3	3	3
13	13	13	13	13
78	78	78	78	78

Between 2010/11 and 2015/16 the City Council invested **£5.3M per annum** in a Highway Investment Programme to deliver the network recovery strategy. The initial period of investment was profiled to tackle the carriageway condition. As can be seen the Ambers and Yellows have been targeted with various treatments such as Micro Asphalt and surface dressing which has meant a recovery from **42.6%** Green in 2010/11 to **76.1%** Green in 2015/16.

By 2015/16 and 2016/17 the emphasis has been to tackle the "reds" and somemore "ambers"

In 2016/17 we reduced the investment requirement to **£4.8M** and going forward to maintain a stand alone RCI we have calculated that an annual budget of **£3.8M** is required.





CVI Survey Data 2007-2011







Scanner Data 2011-2013







Overall Survey Data 2015/2016







"Worst First" is not an option- as Engineers we know that- but how do we convince the Members?

• We sat down with our Senior Officers and Executive Member to seek their "buy in". Explained the Asset based approach and how the backlog will increase if we only tackle the "reds". This was rolled out to other members by holding "Roadshows" and we invited them to "live demonstrations" of works on site.

• We have suggested that Senior Officers and Executive Members undertake the HMEP Leadership and Introduction to Asset Management training module in order to understand that this is a partnership approach to deliver the desired outcomes.

•We presented different options/scenarios from "do nothing", various investment models and a "Worst First" to highlight the potential risks that could occur- e.g. increase in accidents claims, reputational damage, leading to reduced funding from Department for Transport etc.

•Defined the end point of the project, clearly including the level of funding required to achieve the defined target and prevent further deterioration through depreciation.



"Worst First" is not an option- as Engineers we know that- but how do we convince the Public?

• We held a series of briefings with the Local Neighbourhood Community Committees and residents/business representatives.

•We provide leaflets and updates on work progress and planned works to all the Community Committees on a monthly basis both printed and electronically.

•Publish the information on our website on a monthly basis which can be downloaded.

•Answer Social Media enquiries through a dedicated officer.

•The Council has devolved highways budgets to the Community Committees to allow them to make local decisions and priorities.

• Keep it Simple! We explained in a non technical way the techniques and processes used so that they understood the cost benefits of treatments. THINK RONSEAL For Micro Asphalt!





"Worst First" is not an option- as Engineers we know that- but how do we convince the Public?



		- 75			1.1
		14			1.1.1
and a statement		-			
ACTOR OF THE OWNER	103		- 11	-	
and the second second		191		THE R. LEWIS CO.	14 1
and a statement		14			1111
and the second second		24			-



Highway Services Post Contract Contomer Satisfaction Surveys

Road Surface Dressing IN Salford









A combination of conventional and innovative maintenance techniques - such as carriageway inlays, micro-asphalt surface treatments and carriageway surface dressing can be used to good effect to assist in minimising future maintenance liabilities.

This will in turn eventually reduce the amount of funding required for reactive maintenance such as the filling of potholes



Planing and Surfacing















Surface Dressing at Trafford Road







As well as conventional minor repair techniques such as bituminous or asphalt patching, several innovative techniques have been extensively trialled at Salford in an effort to increase outputs and reduce unit costs Techniques including Velocity Patching, Dura-Patch, Infrared Patching and Cold applied Pothole repair systems have all been used successfully over the last eight years. Outputs for some of these techniques can be as much as 100 square metres per day, while unit costs can be as low as £10.00 per square metre.



Velocity Patching and Infra Red Patching







Cold Lay pothole repair technique















Title Subtitle Date













Title Subtitle Date

Footway Micro Surfacing





Thanks for listening

Any Questions?



