



**London
Streets**

Defining the Required Standard

Herbert Micallef

**Highways Department
TfL Roads Directorate**

Outline

- **RDs Objectives & Service Delivery Statements**
- **Making Maintenance Decisions & Setting Service Levels**
- **RDs Roadmap**
- **Questions and Answers**

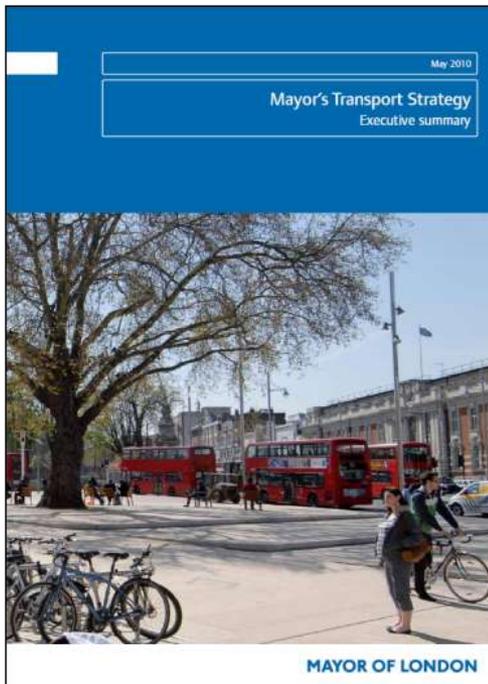


RDs Objectives & Service Delivery Statements



Mayor's Transport Strategy

The Mayor's Transport Strategy sets out the need for London's road network to function effectively both as a set of corridors for traffic movement and as a collection of places in which people live, work and play.



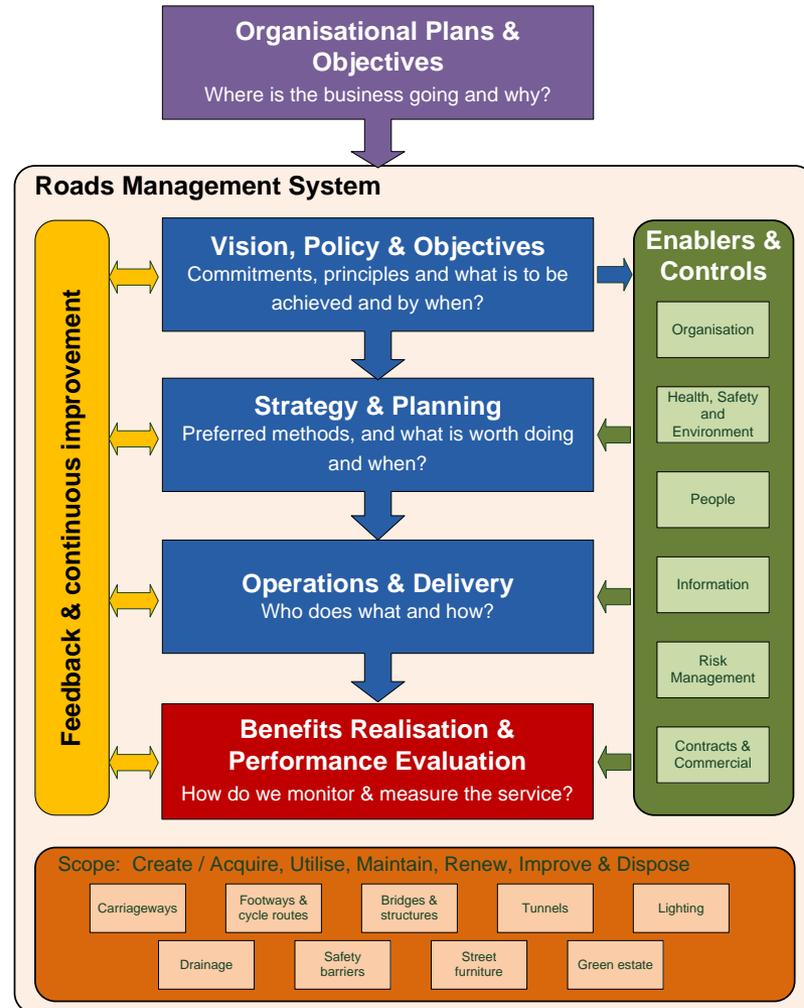
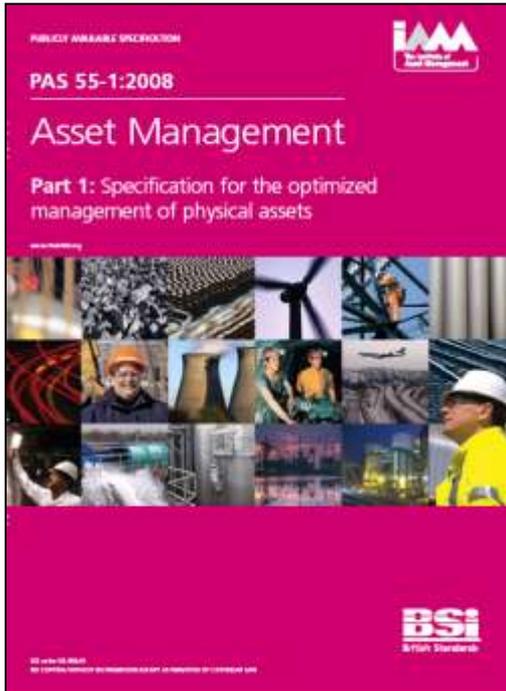
“London’s transport system should excel among those of global cities, providing access to opportunities for all its people and enterprises, achieving the highest environmental standards and leading the world in its approach to tackling urban transport challenges of the 21st century.”

The Mayor's Transport Strategy sets out **six** high level goals, which are supported by **16** challenges and **26** outcomes.



Highways Management

- All highway activities are aligned to the MTS and TfL Business Plan
- The Roads Management System is aligned to best practice



Roads Directorate Objectives

Roads Directorate's Objectives as explained in RDs HAMP (to be published in 2012) are:

- *State of good repair (SOGR)* - maintain red route assets in an optimum state of good repair that is determined by balancing and trading-off cost, risk and customer satisfaction
- *Value for money* – provide an economic and efficient service and demonstrate that it provides value for money
- *Customer Satisfaction* - improve road user satisfaction with regard to the condition of roads and footways, the management of roadworks and traffic congestion
- *Journey time reliability* - smooth traffic flow and improve network reliability
- *Streetscape* - improve the urban realm by enhancing streetscapes
- *Safety* - facilitate an increase in walking and cycling through timely response to defects such as potholes and defective ironworks
- *Environment* - protect and enhance the environment by maintaining the green estate and making a positive contribution to air quality, noise and climate change adaptation and mitigation



Supporting RDs Objectives



RDs objectives are broken down into more readily understandable Service Delivery Statements.

Each Service Delivery Statement is aligned to one or more KPIs.

Service delivery statements describe what the asset management objectives actually mean in terms of the service to be delivered



Service to be Delivered

Asset Management Objective	Service Delivery Statements
<p><i>State of good repair (SOGR)</i> – maintain assets in an optimum State of Good Repair</p>	<ul style="list-style-type: none"> • Maintain all discrete highway assets in a State of Good Repair by balancing and trading-off cost, risk and customer satisfaction
<p><i>Value for money</i> – provide an economic and efficient service and demonstrate that it provides value for money</p>	<ul style="list-style-type: none"> • Continually improve and refine how RD and their suppliers work to achieve better value for money • Use sound commercial and contractual arrangements to deliver value for money • Monitor and benchmark costs
<p><i>Customer Satisfaction</i> - improve road user satisfaction with regard to the condition of roads and footways, the management of road works and traffic congestion</p>	<ul style="list-style-type: none"> • Take into consideration customer requirements when planning maintenance • Respond effectively to customer enquiries within specified timescales • Liaise with customers with regards to scheme delivery



Setting Service Targets

Acceptability	Description
Broadly acceptable performance ↑	<i>Customer</i> – meets or exceeds preferred service expectations <i>Statutory and Regulatory</i> – exceeds full requirements <i>National Highway Guidance</i> – exceeds recognised good practice
	<i>Customer</i> – exceeds minimum service expectations <i>Statutory and Regulatory</i> – meets full requirements <i>National Highway Guidance</i> – meets recognised good practice
	<i>Customer</i> – meets, or in some cases is below, minimum service expectations <i>Statutory and Regulatory</i> – meets minimum requirements <i>National Highway Guidance</i> – meets minimum standards
Broadly unacceptable performance ↓	<i>Customer</i> – below minimum service expectations <i>Statutory and Regulatory</i> – below minimum requirements <i>National Highway Guidance</i> – below minimum standards

There are many factors that influence the required and deliverable level of service, including safety risks, function, cost, priorities, industry standards and customer satisfaction.

So looking at Risk, Whole life Cost & Functionality what has TfLs Roads Directorate done **to define the Required Standard?**



Making Maintenance Decisions & Setting Service Levels



Three-Legged Stool



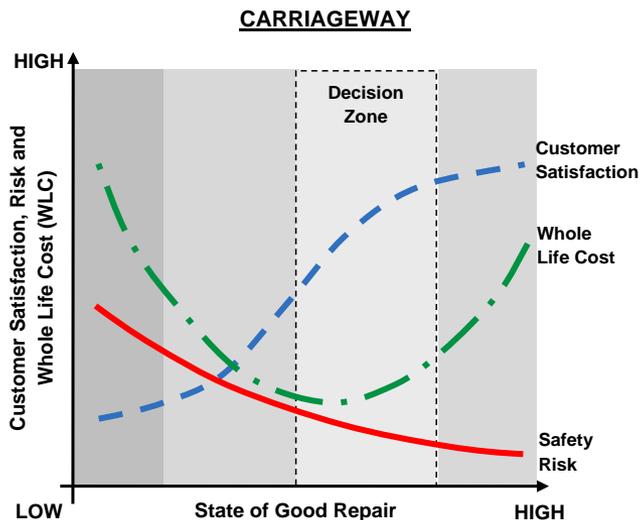
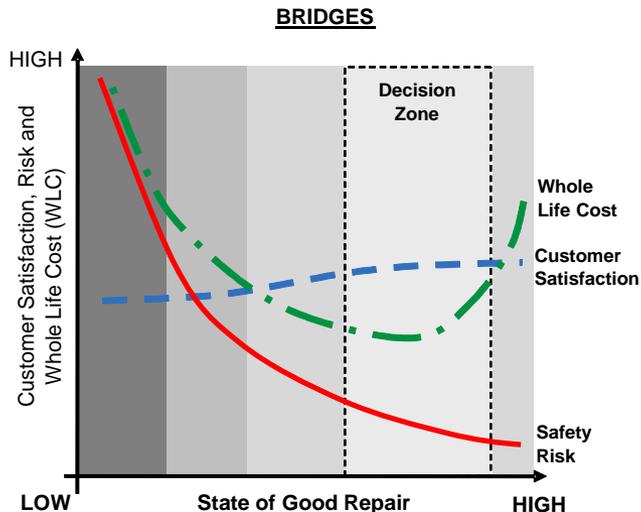
SOGR of highway assets is, in general, directly related to how much money is spent on them, both in terms of capital and operational maintenance.

For every major type of asset there is a theoretical SOGR that minimises whole life costs. Lower or higher levels of SOGR typically result in higher whole life costs. For example, a lower SOGR results in more patching of minor defects while a higher SOGR requires more frequent capital maintenance.

SOGR, however, also influences overall levels of customer satisfaction and risk. Optimum levels of spending to achieve customer satisfaction targets or risk mitigation may therefore not be the same as those required to minimise whole life cost



Maintenance ... When?



This introduces the concept of a range of 'acceptable' expenditure levels within which investment decisions can be taken, both for short-term and long-term investment.

However, the relationships and decision zone will be different for each asset type.

For bridges, because most highway users are less aware of the condition of a bridge compared to the carriageway, risk and whole life costs become the key decision drivers, with the decision zone moving to the right to ensure risks are suitably mitigated. Customer satisfaction is therefore comparatively unlikely to be a significant driver for bridges, although this may be different for other structure types such as pedestrian subways.

Roads Directorate has identified that customer satisfaction is an important driver for carriageway, footway and drainage assets.

So ... What did Roads Directorate do?



RDs Roadmap

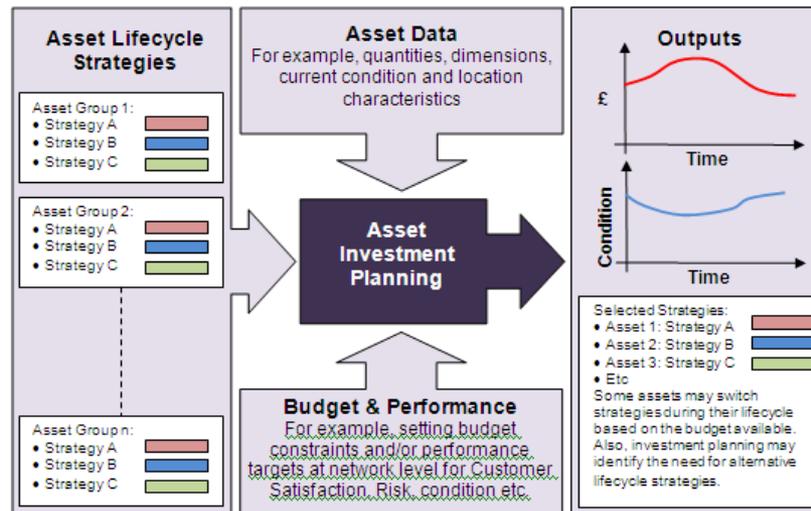


SOGR (Risk) and Cost

Asset Lifecycle Strategies – Determine a mix of optimum or sub-optimum management options for highway assets

Asset Investment Planning – Technique of analysing the lifecycle strategies for all the assets within defined cost and performance requirements,

Value management – Systematic approach for identifying, assessing, prioritising and optimising the forward programme of highway capital maintenance projects. The forward programme covers the next three years and is reviewed and updated annually using the value management process.



Incorporating Customer Criteria

RD has been on a journey to identify how asset management impacts customer satisfaction and finding ways of implementing customer driven decision making.

FY 2009/10

- Stated Preference Survey
- Customer Preference Indicator
- Develop first Capital Renewal Programme inclusive of Customer Criteria

FY 2010/11

- Corridor Based Customer Satisfaction Surveys
- Carriageway Levels of Service Survey (including drainage)
- Footway Levels of Service Survey

FY 2011/12

- Customer Levels of Service Indicators
- Develop Capital Renewal Programme prioritised according to Customer Levels of Service Indicator and other criteria

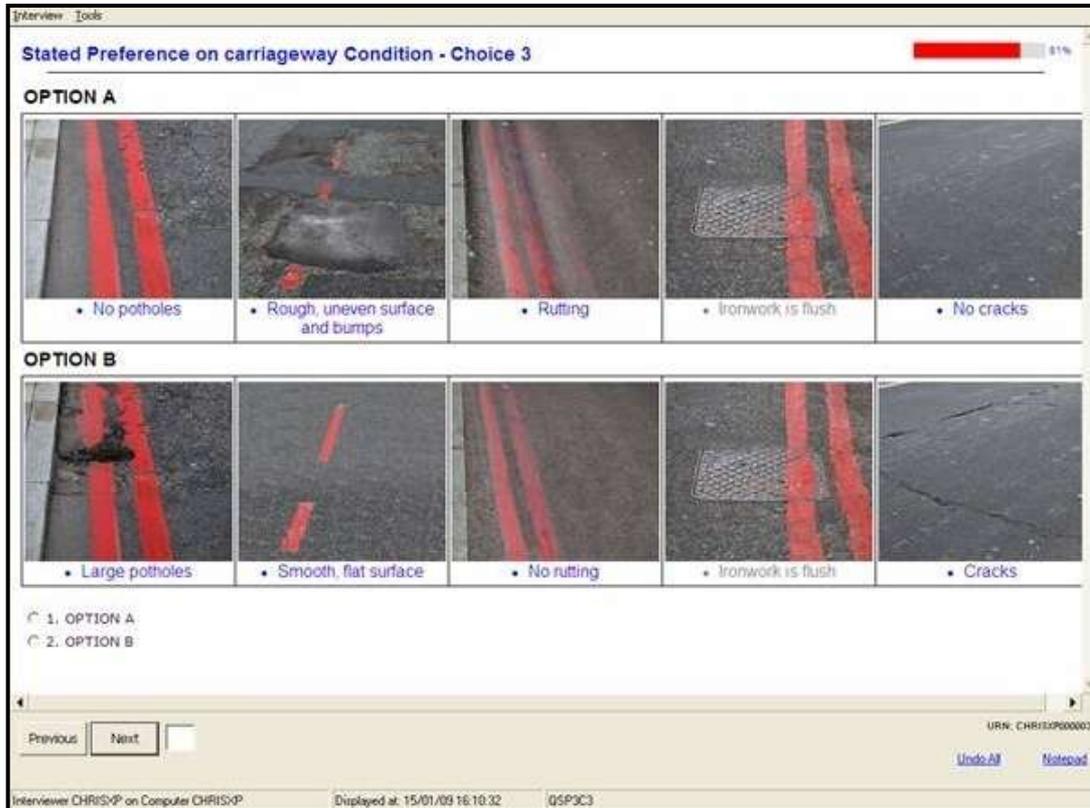


Stated Preference

The purpose of this survey was to gather customer information that informs the priority of carriageway and footway capital renewal schemes.

Each question presented two sets of pictures, Option A and Option B. The photographs in show carriageways in a range of conditions, both with and without defects. Customers were asked to select their preferred option in each case, that is, given these are the only options available, which would you prefer to represent the condition of the footways/carriageways used by you?

The findings from this survey have been used to rank defect types based on customer preference. This was used to inform and prioritise capital maintenance.



Stated Preference Condition Index

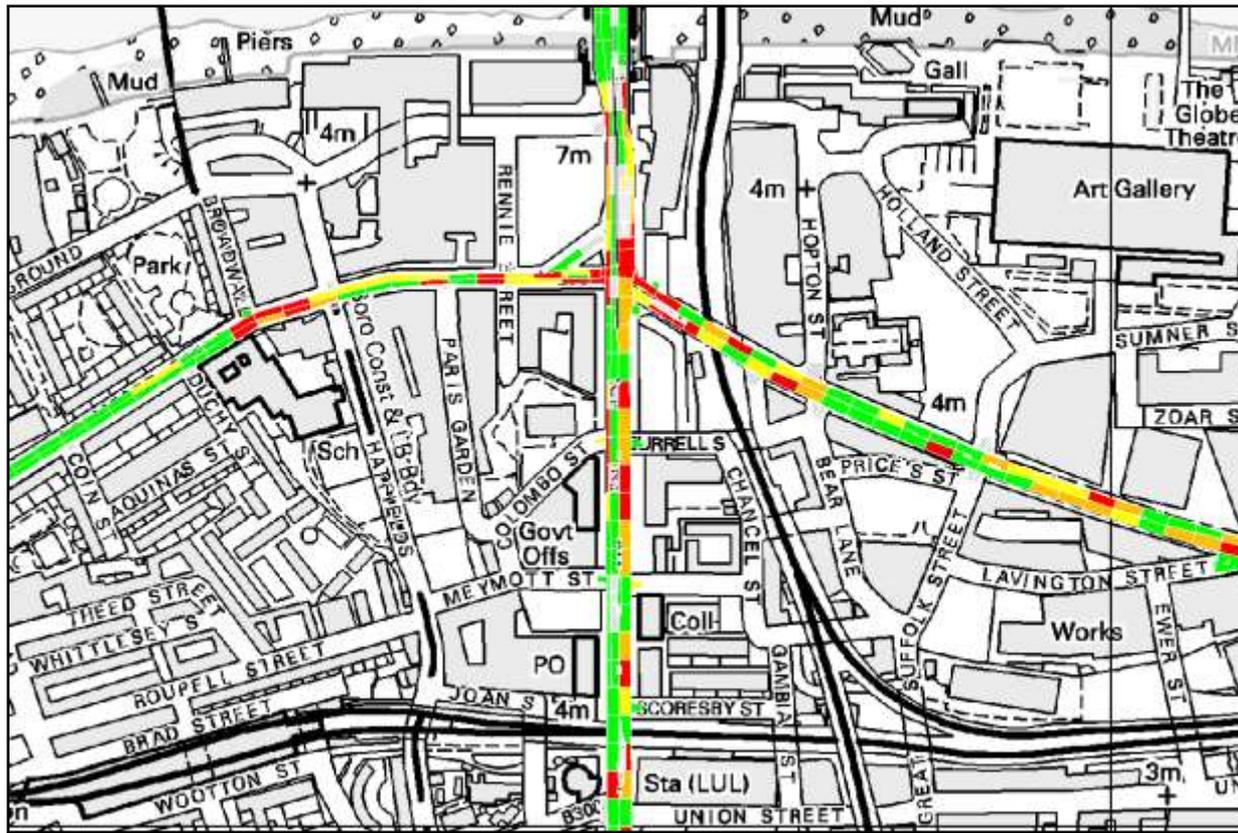
Defects

UKPMS
OCI

Scheme
Identification
Process

Value Manage
Contribution to
Customer and Safety
(SP CI & SCRIM)

Scheme
Prioritisation



A stated preference condition index was built and it was (and still is) included as part of the VM process for scheme prioritisation.

The first programme where this indicator was used was for the 2010-11, 3 year forward carriageway programme.



Corridor Based Satisfaction

RD has changed its customer satisfaction surveys for surface transport from a Pan London type to a corridor based one. (A41/A1, A12, A13, A2/A20/A102, A21, A214/A217, A23, A3, A316 etc...)

WHY?

Easier to identify whether satisfaction in an area can be related to:

- Condition and defectiveness
- Lighting
- Drainage
- Management of Road Works
- Congestion
- Etc...

RESULTS?



Results

Shown in order of satisfaction for all trips



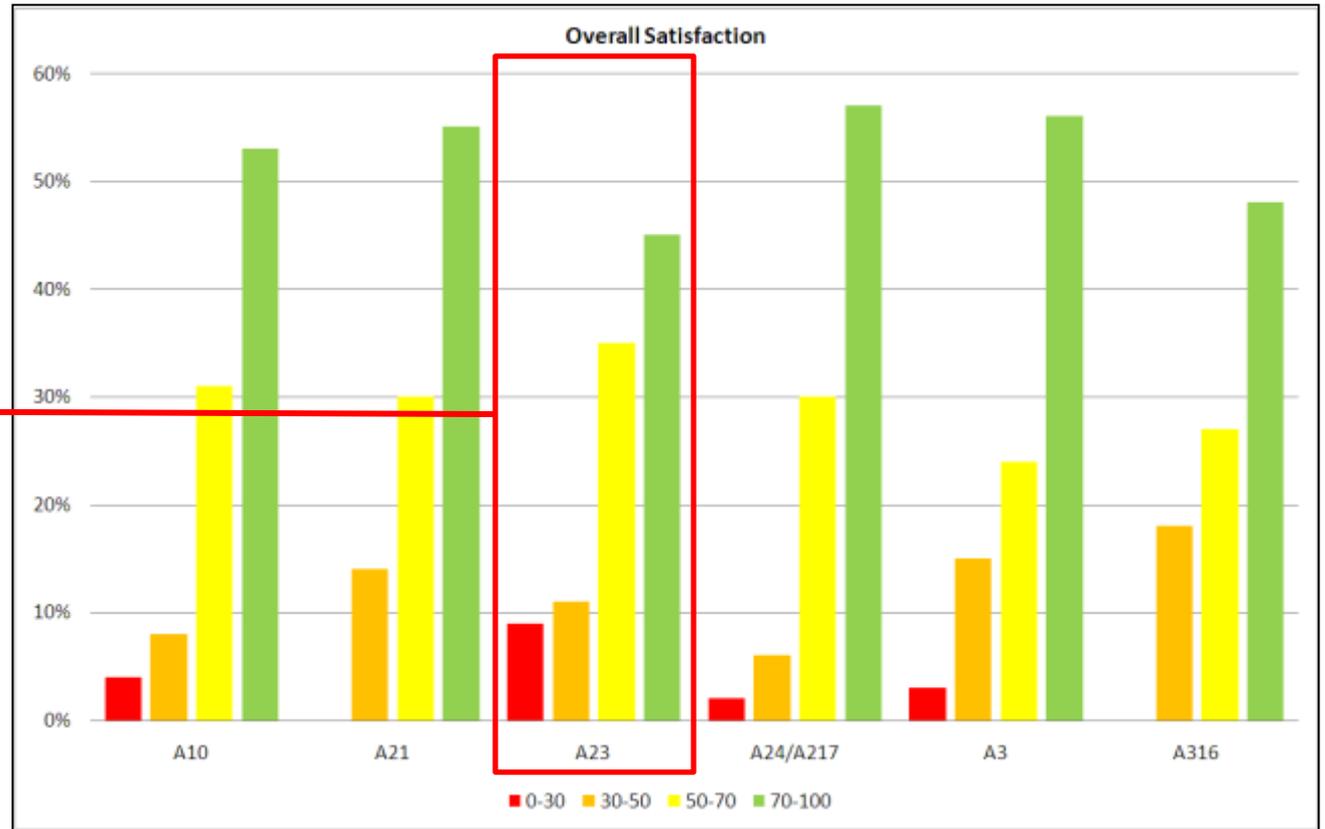
Satisfaction questions for drivers and their respective satisfaction scores.



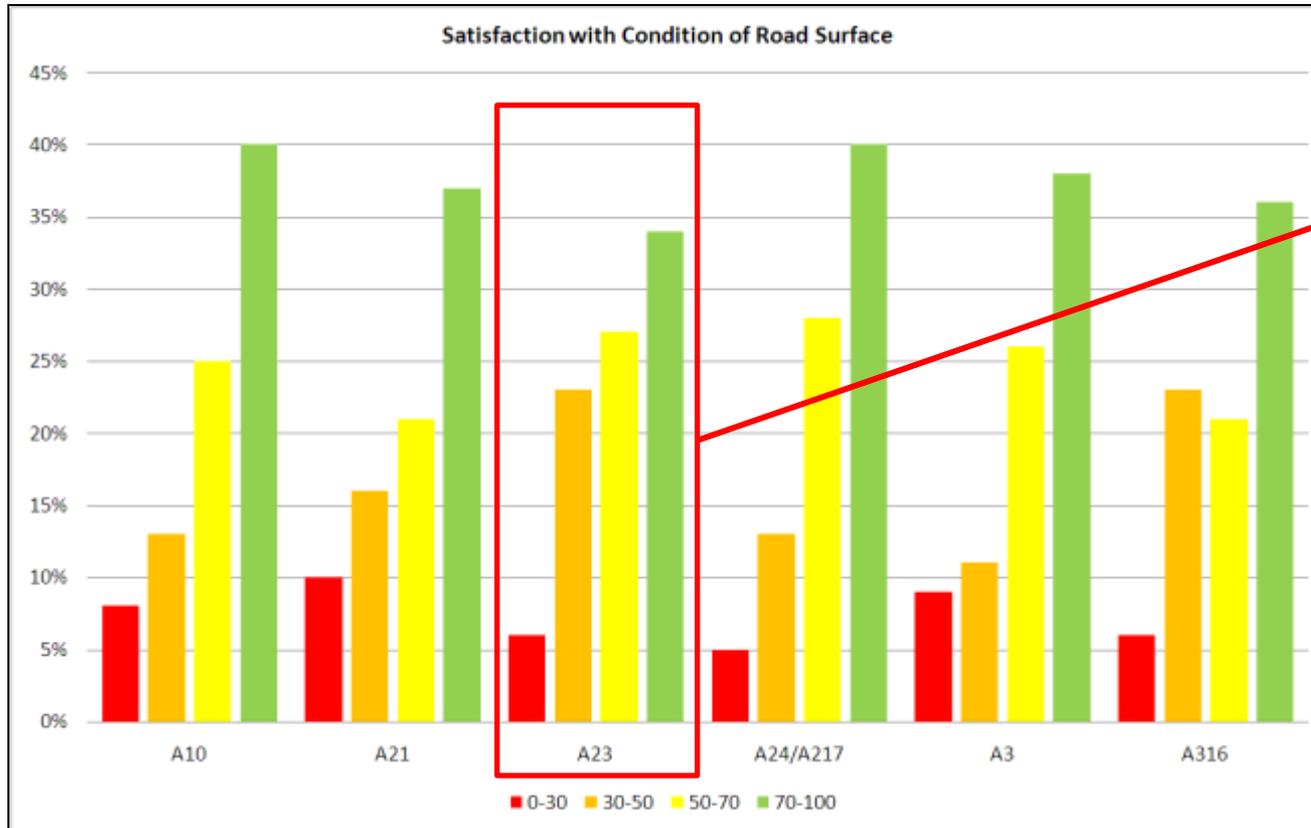
Why are some more Satisfied than others?

Why is the A23
faring worse than
the other
corridors?

Is it related to
asset condition?



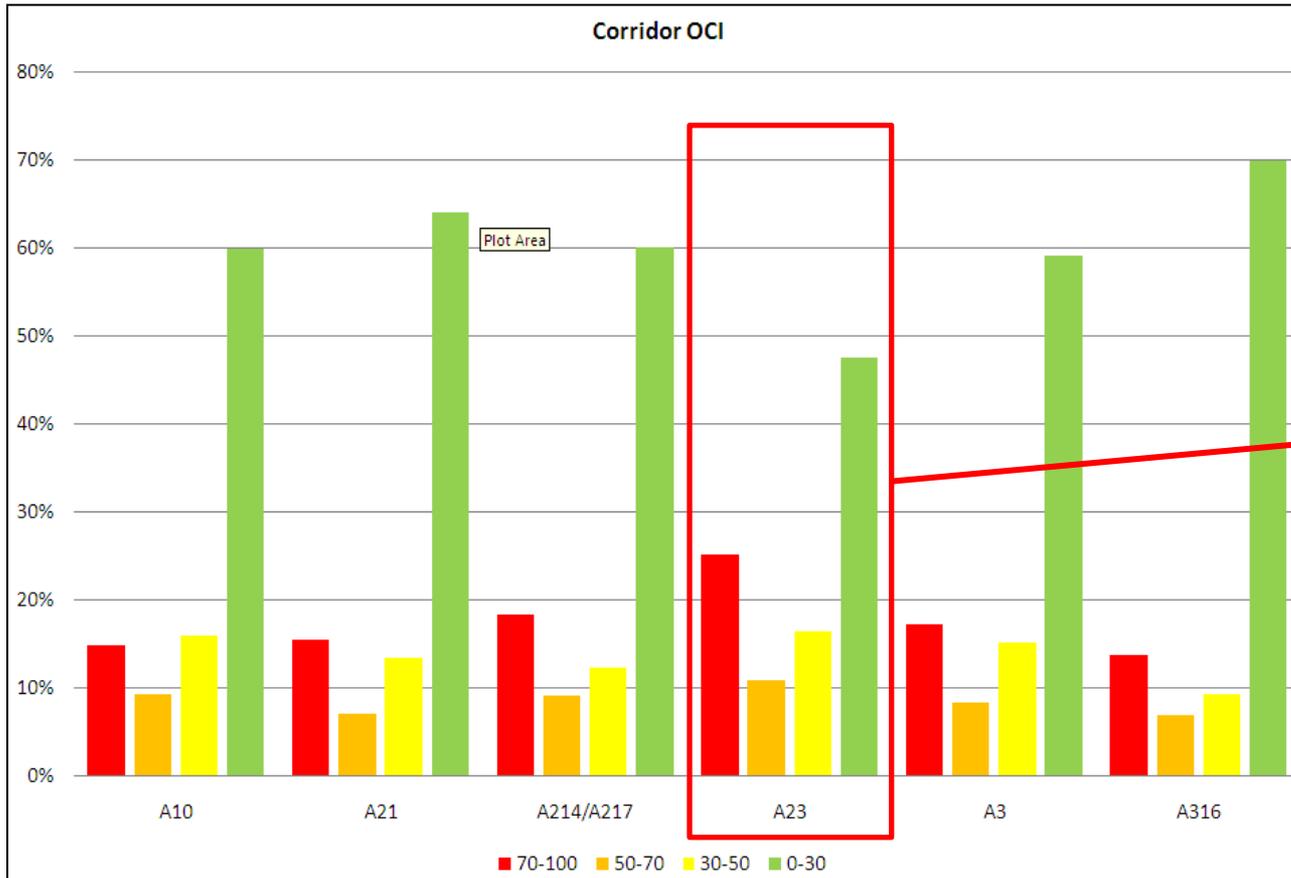
But ... They're not Engineers!?



Satisfaction with the condition of the road surface is one of the attributes in which the A23 suffers compared to other corridors



The Engineers said ...



Engineering established that the A23 is the worst performer with regards to overall condition (structural, wearing course & surface properties indicators).

It is therefore reassuring to know that RDs customers understand the issues with our road network and can easily identify areas below the expected service standard (levels of service)



RD Customer Levels of Service

The purpose of this survey was to gather customer information that enables the 'acceptable range of condition' for carriageway and footway to be defined. To achieve this, this survey was designed to gather details on customer's **minimum** and **preferred** levels of service with respect to specific condition defects.

The survey was comprised of 400 drives, 200 cyclists and 340 pedestrians, including 57 with mobility impairment and 35 with a visual impairment.

The survey asked the public to only rate defects that:

- They know about
- Have seen on the red route

The survey followed UKPMS methodology where a defect covering an area or length is rated according to the percentage area it is covering.

Q10A Fretting

Fretting is where the carriageway surface breaks up.

Please look at the following four images and say:

a) At which level of **fretting** would you **prefer** TfL to intervene? and

b) At which level do you think TfL **must** intervene?

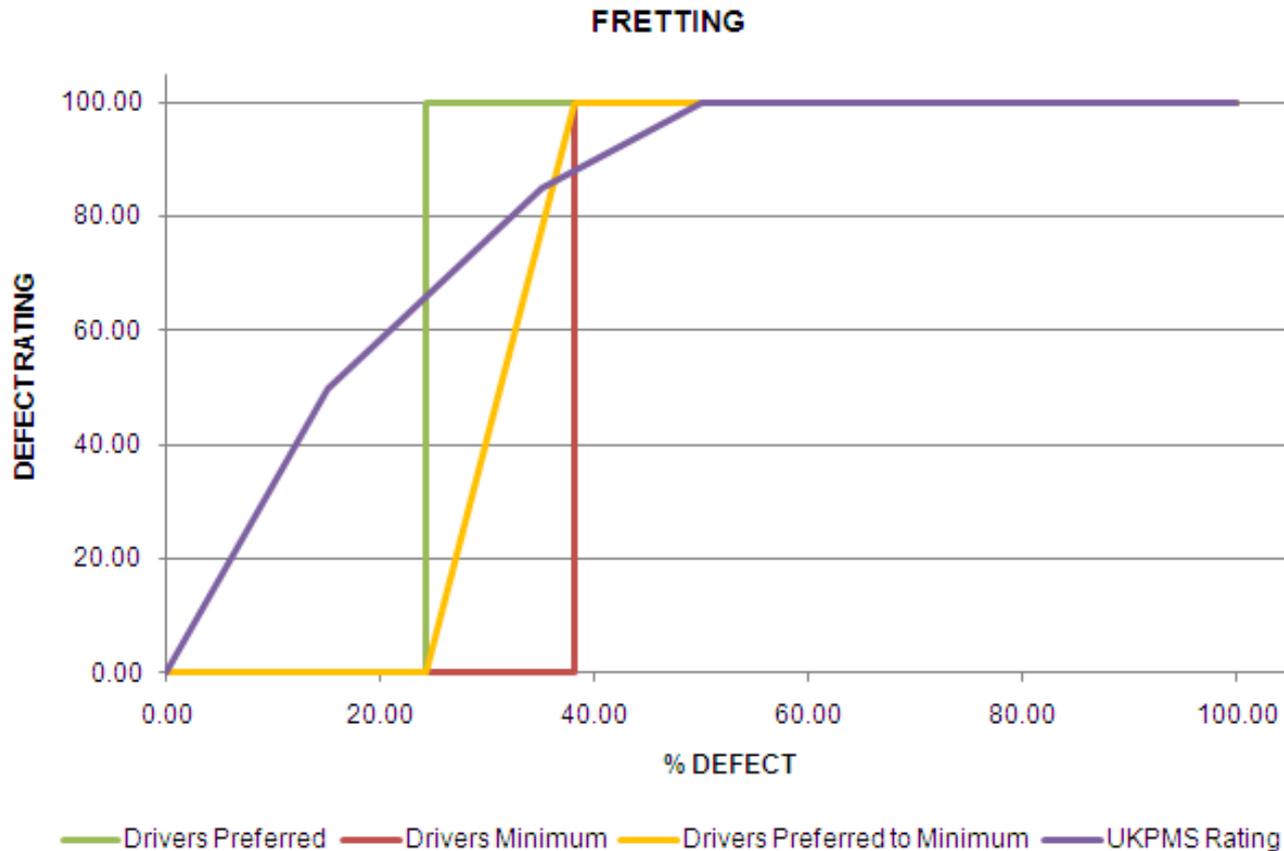
Q10B Q10C



	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
a) Prefer TfL to intervene:											
b) TfL must intervene:											



Good or Bad News?



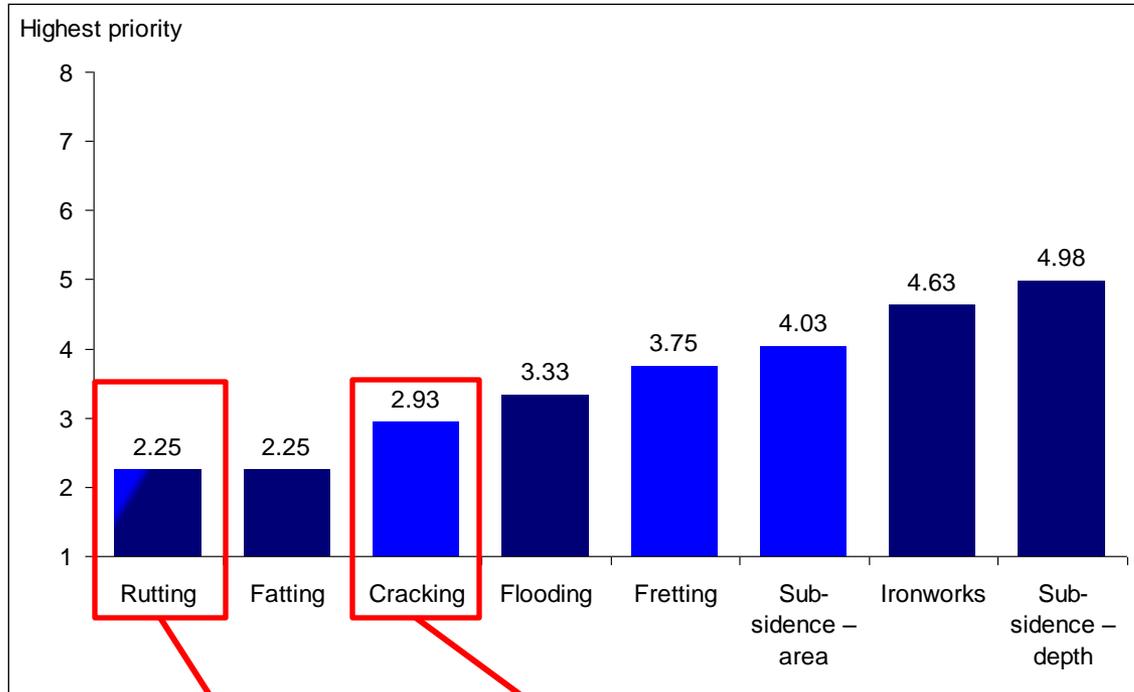
Well generally RD is already doing the right thing. The engineering service is not far off what the customers expect.

But what are their priorities?(RDs current priorities are combinations of rutting and cracking)

Should we divert our investment somewhere else?



Vote ... Alternative Priority



Rutting is now the lowest priority

Cracking is not very far ahead

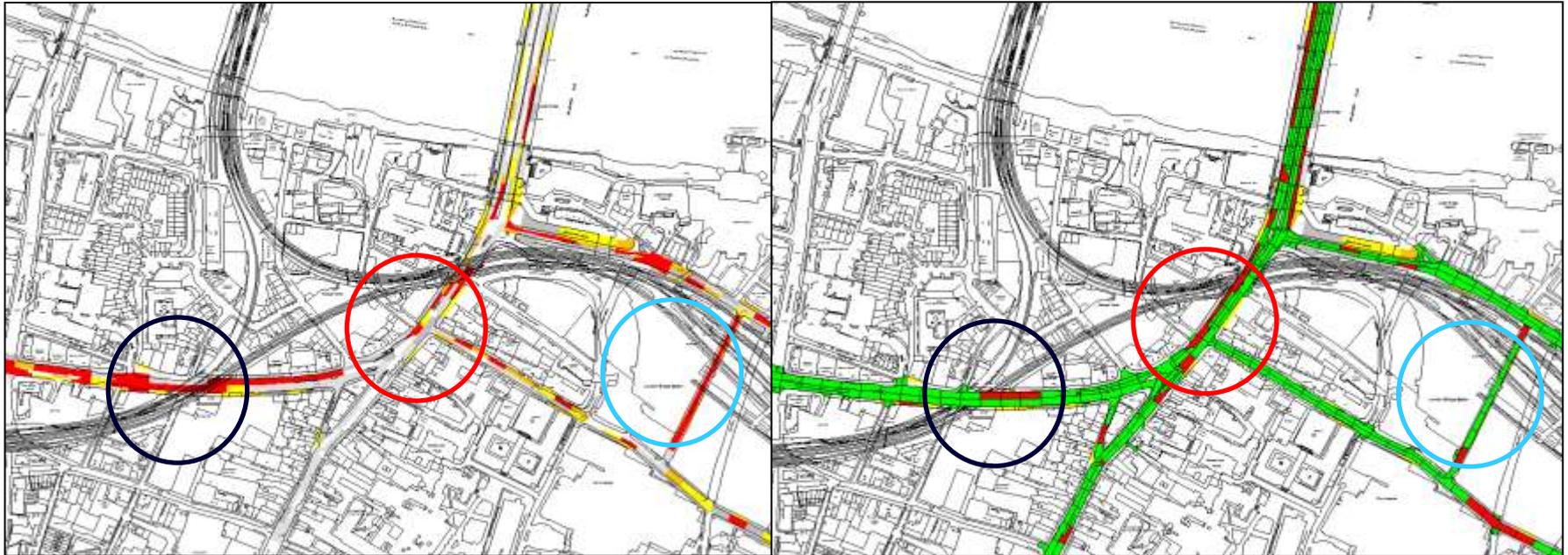
Should RD deliver different schemes just because customers want it that way?

Should we completely ditch engineering and best practice?

Well the answer is that wherever possible RD should try to balance **performance & risk, customer satisfaction and cost**



Changes in Priority



UKPMS OCI

DRIVERS LoS

Other elements such as whole life cost, traffic, number of operational defects rectified in the area, skid resistance (deficiency and priority), etc... Also play a part in the value management of the capital renewal programme as well as customer levels of service.

- Reaffirms High Priority**
- Increases Priority**
- Decreases Priority**



The Best Balancing Act Ever?

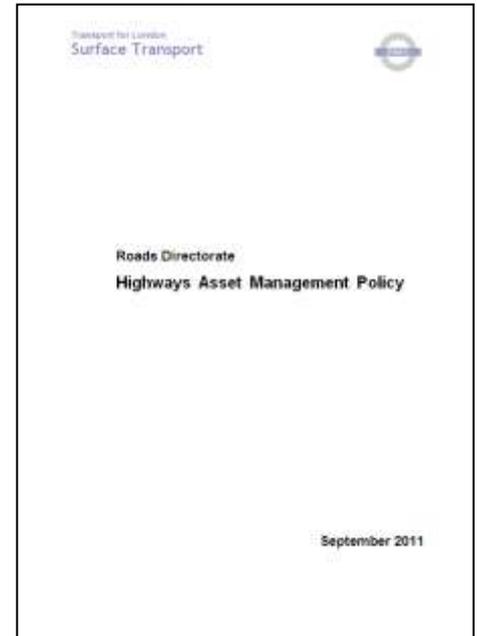
Highways Asset Management Policy– September 2011

RD Senior Management is fully committed to Asset Management.

Our asset management activities will fully align with, support and contribute to the Mayor's Transport Strategy, other relevant TfL policies, strategies and plans, and Road Directorate's vision and mission.

Through good asset management RD will cost-effectively maintain and, where appropriate, improve its highway assets to maximise network safety and reliability while seeking to meet user expectations.

RD, giving due consideration to affordability and resources, will have in place the people, processes, data and tools that ensure asset management activities are delivered effectively, efficiently and economically.



Final Thought

Balancing customer satisfaction, asset performance and cost won't be as straightforward for all assets

We need to start thinking about operational issues in order to understand what is really important to our customers. For example:

- Some areas may require more frequent graffiti cleaning, others may require very little at all – therefore change frequencies
- Gully cleaning may be reviewed to reflect perception of flooding

Customer satisfaction is as important as any asset and service performance indicator and has an effect, as well as is affected by both.



Questions and Answers



Herbert Micallef

0203 054 1254

0759 523 7785

Herbert.Micallef@tfl.gov.uk

