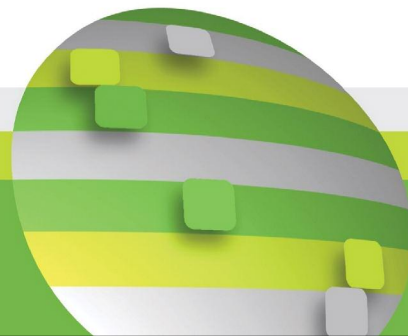




Business needs for a PMS


Andrew Gallagher
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The "core" requirements



- The core requirements are defined in subtly different ways in different places in the project specification
- We understand it to mean:
- "the minimum functionality that all PMS should embody"
- "things that all PMS need to do in the same way"
- "priorities considered as outcomes, not processes"





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Topics

- Road maintenance engineers' needs
- Local highway authorities' needs
- Project (operational) level
- Project selection (tactical) level
- Network (strategic) level





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Data, systems and uses

Data:	Systems:	Uses:
Visual surveys	Pavement management	Asset management
Machine surveys	Integrated highway management	Asset valuation
Inventory	Asset management	Budget allocation
Financial	Enterprise resource management	Condition reporting
		Performance monitoring
		Programme development
		Scheme identification
		Scheme preparation
		Scheme prioritisation



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Context



- The following slides summarise our **CONCLUSIONS** about the business needs for a PMS
- We want you to help us define **which** of those business needs should be in the **core** functional specification
- And, more importantly, **WHY** they have to be in the core (nationally defined)

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What does a person* need?

- An person* wants to know:
 - **Where** to intervene
 - **When** to intervene
 - **How** to intervene (what to do)
- And how much work will be needed in future years:
 - What **types** of work
 - At what **cost** and
 - **When** it will be needed

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*** the person directly responsible for making road maintenance decisions**

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What does a person* need?

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- To be able to make PROJECT level decisions, a person* has to know:
 - What is **causing** the deterioration
 - What are the **practical** options to
 - Treat the symptoms and
 - Remedy the underlying causes
 - What is the **cost effectiveness** of the different options
 - What are the external (or imposed) **constraints** (including budget limitations)
 - Which is the most cost effective **treatment strategy or option** within the imposed constraints

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At the project level

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- Regardless of whether the project is an improvement scheme or a maintenance scheme, the objective of project level analysis is to select the most appropriate strategy, assuming various constraints (including funding).

The most economical design strategy capable of satisfying the overall project requirements

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What does a local authority want?

- To be able to make **good** decisions
- To improve the **quality** of decisions
- By improving the quality of the decision making process at **ALL** levels
 - **Operational** (project of scheme level)
 - **Tactical** (project selection or prioritisation level)
 - **Strategic** (network level)




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What does a local authority want?

- To be able to make NETWORK level decisions, a local highway authority has to know:
 - What is the **overall need** for pavement maintenance, resurfacing and reconstruction
 - What level of **funding** is required to address those needs
 - What are the **feasible** maintenance strategies and funding options
 - What would be the impact of **different** maintenance strategies and funding options on
 - The condition of the road network
 - The level of service provided






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What does a local authority want?

- To be able to decide:
- Which maintenance strategy and funding option to pursue
- Which road lengths to consider for more detailed investigation or appraisal






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At the network level

- Projects can be assessed to establish a multi-year capital maintenance programme
- Pavement management data, including inventory, condition and cost data are evaluated to
 - Prioritise network needs
 - Develop listings of recommended schemes and their respective treatments
 - Based on budget allocations



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Project selection or prioritisation

- There are a number of alternative ways to decide project funding
- Some authorities have an intermediate level, between network level and project level, sometimes called a “project selection” or “prioritisation” level, which may include the use of value management tools
- This is particularly so where an authority divides funding between areas or regions, and wants to make the best allocation of its resources.



Project selection or prioritisation

- The purpose of this **tactical** “project selection” level is to define the relative priority of the road section lengths in the maintenance programme within the available limits of the current funding cycle.
- This may include preliminary engineering analysis to:
 - Identify suitable treatments
 - Improve cost estimates (including other cost items)
 - Rate priority relative to overall objectives
 - Finalise the list of projects and the allocation of funds



Organisational requirements


- In some authorities, different groups and levels of seniority may be responsible for
 - **network**,
 - **project selection** and
 - **project level**
 management activities and decisions.
- Each group and level needs different amounts of information and detail. In general, detail is **summarised** at more senior levels, and for any external funding authority



Business needs



Industry	Local authorities	Local authority service providers
<ul style="list-style-type: none"> ▪ UKPMS developers ▪ Other PMS developers ▪ SCANNER contractors ▪ Other survey contractors 	<ul style="list-style-type: none"> ▪ Network managers ▪ Asset managers ▪ Road managers ▪ Transport policy? ▪ Finance and accounting? ▪ Who else? 	<ul style="list-style-type: none"> ▪ Consultants ▪ Contractors ▪ Partnerships ▪ Privately financed contractors?







Issues for discussion

- Have we identified the business needs correctly?
- **Which** of those business needs should be in the **core** functional specification ?
- **WHY** should they be in the **core** (nationally defined) specification?



 






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THANK YOU





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