



17<sup>th</sup> Road Pavements Forum, 13 – 14 May 2009, George

# HARMONISATION OF PAVEMENT CONDITION REPORTING



Presented by:  
Paul Nordengen  
SARF/CSIR



## *Resolution #2*

- The need was identified to harmonise pavement condition reporting by all road authorities
- That an RPF working group convened by SARF be established to interact with, and support the activities of, the RCB in line with the above need



# NEED FOR A UNIFORM APPROACH

- Accuracy in determining funding requirements
- Strengthen negotiations with Treasury for funding for road maintenance
- Equitable allocation of funds across authorities
- Realistic maintenance strategies/ programmes
- Reliable data for long term planning





# CURRENT STATUS

- Underlying problem: lack of qualified and experienced staff within many road authorities to implement pavement management systems
- Further affects the task of obtaining info required for such an assessment
- Difficult to identify and make contact with the responsible person in the correct department of each authority





# CURRENT STATUS

- COTO sub-committee Road Network Management Systems (RNMS) continues to function although formal status has not been verified
- Through the RNMS sub-committee, new and existing manuals have been and are being produced/updated
- TMH 12: Gravel Road Visual Assessments
- TMH 6: Surveillance Measurements (Roughness, Rutting etc.)





# FUTURE PLANS

- Updating of:
  - TMH 9 (1992): Visual Assessments for Flexible Pavements
  - TRH 22 (1994): Pavement Management Systems
- E-mail request has been sent to industry experts to establish who would be interested in participating in the above projects





# PROGRESS: EXISTING CONDITION DATA

- SANRAL has been tasked by DoT and National Treasury to collate all available condition data of the entire public road network (approx. 600 000 km) and to link it spatially to the road network
- Condition data of approx. 253 000 km of roads (SANRAL, provinces and major Metros) has been consolidated by SANRAL (uploaded into the SANRAL ITIS database)
- In most cases the data is not older than 3 years







# PROGRESS:

## EXISTING CONDITION DATA

### National and Provincial roads

Source	Total Network (km)	% of All Networks	Total Network Paved (km)	% of Own Network Paved	% of All Network Paved	Total Network Gravel (km)	% of Own Networks Gravel	% of All Networks Gravel
NATIONAL	16002	8.59	16002	100	24.93	0	0	0
EASTERN CAPE	32218	17.29	5878	18.24	9.16	26340	81.76	21.55
FREESTATE	27637	14.83	6313	22.84	9.84	21325	77.16	17.45
GAUTENG	5344	2.87	3449	64.53	5.37	1895	35.47	1.55
KWAZULU NATAL	6749	3.62	6749	100	10.52	0	0	0
LIMPOPO	22035	11.82	6639	30.13	10.34	15396	69.87	12.6
MPUMALANGA	13840	7.43	4952	35.78	7.72	8887	64.22	7.27
NORTH WEST	20512	11.01	5551	27.06	8.65	14961	72.94	12.24
NORTHERN CAPE	25743	13.81	2539	9.86	3.96	23205	90.14	18.99
WESTERN CAPE	16300	8.75	6106	37.46	9.51	10194	62.54	8.34
	<b>186380</b>		<b>64178</b>			<b>122203</b>		





# PROGRESS: EXISTING CONDITION DATA

## Metropolitan roads



Source	Total Network (km)	% of All Networks	Total Network Paved (km)	% of Total Network Paved	% of All Network Paved	Total Network Gravel (km)	% of Total Networks Gravel	% of All Networks Gravel
BUFFALO CITY	2988	4.51	2377	79.56	4.59	611	20.44	4.22
CAPE TOWN	9767	14.75	9564	97.92	18.48	203	2.08	1.4
EKURHULENI	8287	12.52	7132	86.07	13.78	1154	13.93	7.98
ETHEKWINI	11975	18.09	5477	45.74	10.59	6498	54.26	44.93
JOHANNESBURG	11152	16.84	9140	81.96	17.66	2012	18.04	13.91
MANGAUNG	6078	9.18	4883	80.33	9.44	1195	19.67	8.27
MOGALE CITY	4707	7.11	4571	97.1	8.83	136	2.9	0.94
NELSON MANDLA TSHWANE	3360	5.08	2917	86.8	5.64	444	13.2	3.07
	<b>66203</b>		<b>51741</b>			<b>14462</b>		



# PROGRESS: EXISTING CONDITION DATA

- Condition data is based on TMH 9
- An important question is:  
To what extent is the data harmonised  
and comparable from one road  
authority to the next?





# PROGRESS: EXISTING CONDITION DATA

- Based on the data received, a priority list of data gaps (based on town population and network length) has been compiled
- This will be followed up this financial year (2009/10) by a consultant to establish whether data is available or not
- In cases where no data exists, visual evaluators will be appointed during next financial year (2010/11) to carry out the required visual assessments







# POSSIBLE SUPPLEMENTARY APPROACH

- Through the SARF regional membership, identify and task an appropriate member in each region to make use of his/her local knowledge to contact the authorities in order to obtain the required information.
- Thus the proposed committee in terms of this resolution should consist of members from around the country reporting back to a central liaison team who would then support and interact with the efforts of the other bodies having similar objectives.



# PROPOSED WORKING GROUP FOR HARMONISATION OF PAVEMENT CONDITION REPORTING

## INDIVIDUALS AVAILABLE TO ASSIST:

- Louw Kannemeyer
- Dave Johnson/Paul Olivier
- Gerrie van Zyl
- Andre van der Gryp
- Tinus van Heerden
- Johan Viktor
- Arthur Taute

